



**Impact on the airline industry of customer complaints filed through social media**

Research Report

Waikato Institute of Technology

Hamilton, New Zealand

**Suman Bala, Student ID: 15426964**

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Statement of authenticity

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Suman Bala  
WINTEC,  
Hamilton City Campus.  
New Zealand.  
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## Abstract

Every industry receives complaints from customers every day, and customers use different methods to reach a company to show their dissatisfaction. Like other industries, the airline industry has also faced lots of complaints every day. Thousands of people travel daily in planes all over the world. Plenty of employees are working in the airline industry to fulfil the needs of customers. Still, some people face problems before departing, during travelling and after the arrival of the flight. Some people file complaints about the problem faced during air trips and some passengers never do. Nowadays, some people use social media to register their complaints to the airline industry while others choose to make complaints face to face, email or through call centres. Customers are using Social Media as a complaint tool or not. Social media as a complaint tool, is examined in this research. Airline companies try to satisfy their customer with the help of the complaint management system. Sometimes the complaint management system fails to satisfy the customer. Satisfied customer increases positive word of mouth and dissatisfied negative word of mouth. Every dissatisfied customer behaves differently. A dissatisfied customer shares a poor experience with the company on social media. Positive and negative word of mouth has an impact on airliner companies. Social media impacts the airline industry directly and indirectly. Moreover, the importance of complaints, frontline staff, complaint handling, word of mouth (WOM) and customer loyalty is observed in this research. To describe the elements, that can influence the usefulness and usability of social media in formal filing complaints to the airline companies, TAM (Technology Acceptance Model) was selected. An online survey was conducted and distributed through the help of Social Media. 93 responses were collected after four-weeks survey. All the responses were analyzed with the quantitative method. After analyses, all the data from literature and survey are discussed. The findings declared that people used Social Media for share experiences, complaining, e-WOM, get information, updates and communication with the airline companies. People from all age groups used social media to perform different tasks. People from 34-44 age groups remain more active than other age groups. Females use social media websites for WOM and males use to file their complaints. Facebook is frequently used social media website to perform different tasks by males and females from all age groups.

**Keywords:** Airline industry, Complaints, Complaint handling, Customer loyalty, Customer satisfaction, Social media, WOM/e-WOM.

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## List of Acronyms

### A

ASU- Actual System Use

### B

BIU- Behaviour Intention to Use

### C

C2C- Customer to customers communication

C2B- Customers to Business communication

### D

DOT- Department of Transport

### E

e-WOM- Electronic Word of Mouth (electronically communication between two or groups of customers for the same company or services)

e-book- Electronic book

### G

GDP- Gross Domestic Product

### I

ICAO- International Civil Aviation Organisation

### P

PU- Perceived Useful

PEU- Perceived ease of Use

### T

TAM- Technology Acceptance Model

### U

**US-** United States

**S**

Social media- application or websites that allow the users to share their real-time data like images and videos with other

**W**

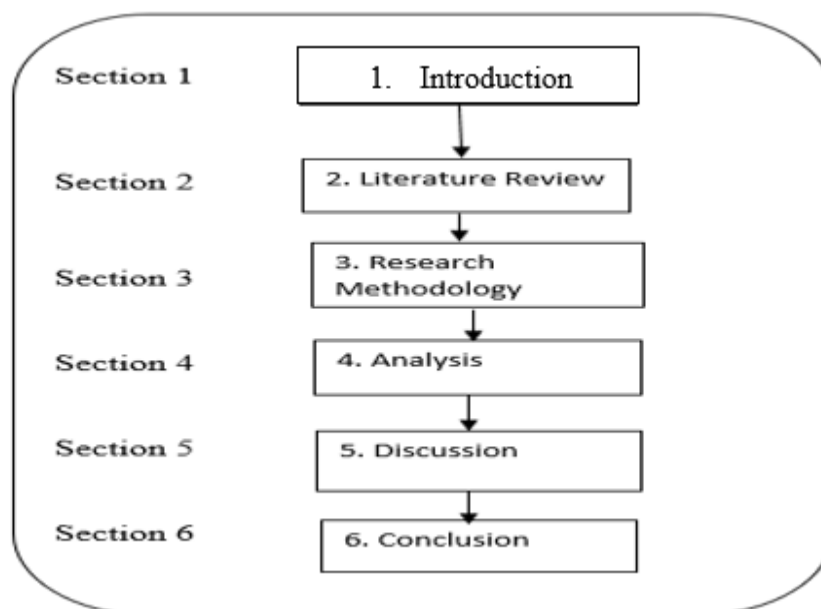
**WOM-** World of Mouth (interaction between customers or groups for same brand or services)

# 1 Introduction

The airline industry is an established industry globally and one of the largest international businesses. After the 1<sup>st</sup> World War in 1919, airline services were started, but the industry became fully-fledged after the 2<sup>nd</sup> World War. According to the international civil aviation organisation (ICAO) report, 1.5 billion customers travelled by commercial airline between 1949 and 1999, with 300 billion dollars annual revenue to the US (Khudhair, Jusoh, Mardani, Nor, & Streimikiene, 2019). From 1995 to 2005, 1.7 million employees were working in the airline industry all over the world and classified as the most significant industry of the entire world (Migdadi, 2018). Tourism and travel have influenced the airline industry as astonishing growth and contributing 10% of the entire world Gross Domestic Product (GDP) that is around 11% to the overall world utilisation (Akyuwen, 2015). O'Kelly (2016) state that every airline company sharing the goal of a safe and pleasant journey for customers with the several struggling issues like manage service quality make the customer happy, on-time complaint handling, manage good staff or satisfy their staff. Maher (2016) explains that airline companies face several challenges about making their customers happy and have a relatively short time to solve customer issues and problems. According to Grancay (2015), several factors impacts on the airline business. These factors are classified into two different categories: external and internal. External facts are political, economic, social, technological, environmental and legal. Internal factors are a company's internal culture, the performance of employees and communication level between employees and employers. In this research, two external factors are examined technological and social. To identify the role of technology in the airline industry and the use of technology by customers for the airline industry. Social media is identified as a technology that is using by industry and people nowadays. All airline companies are using technology to expand their business such as marketing, booking tickets, updates and communications with consumers. Today's era, social and technology are working together in the form of social media. Consequently, social media has provided a new platform to the customer and business to interact with each other. Social media plays an important role between the consumers and the airline industry. Airline companies are using social media for marketing and provide information to customers. Customers use social media to obtain information, book tickets, file complaints, interact with the company and other customers, and share good or bad experiences. Vo, Xiao, and Ho (2019) state that customer's decisions affected by WOM (word of mouth). Negative words, that post on social media, spreads quickly more than positive words. A dissatisfied customer from an airline may complain to a

company, but poor communication and late reply from the airline can generate more complaints and make a customer even more disappointed.

This research examines customer complaint behaviour, ways of complaining, and reasons for positive or negative WOM. The aim of this research is to identify the common method is using in these days for filing complaints. The impact of new technology on the airline industry and airline customers also examined through this research. In this report, traditional methods of complaining are examined along with new methods. To make the concept ease for the research, a structured literature review is presented with a conceptual framework. Social and technology factors that have impacts on airline companies are examined through a literature review. The Technology Acceptance Model (TAM) is used for this research and hypotheses are created according to this theoretical framework. Further, the research methodology for this study is defined with research methods and ethics. A quantitative research method is used for this research. 20 survey questions have been created and put on an online survey system. The gathered data from the survey are analysed in the form of Tables and graphs in the analysis section. In the discussion section, literature and survey data are examined and summed up in the conclusion part. All literature references are shown in the references section. The survey questions are present in the appendices with a flow chart and the ethics forms for this research. The structure of the report is shown in figure 1.



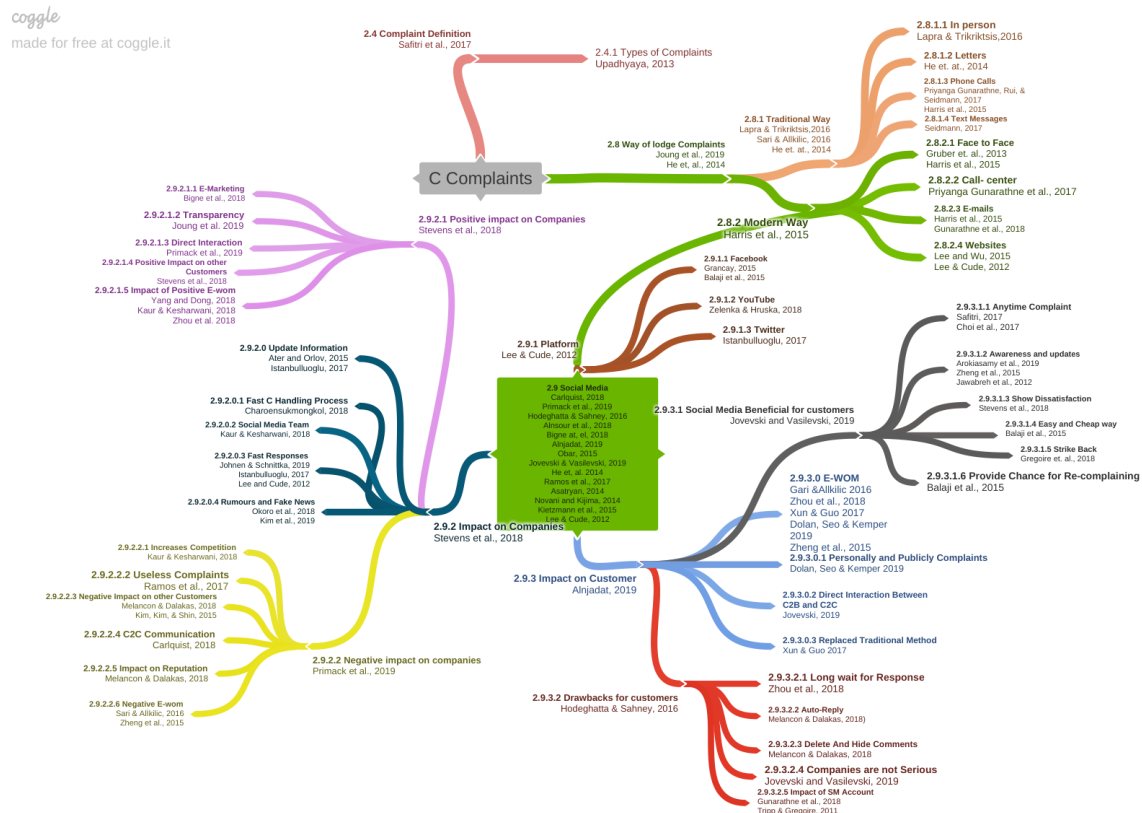
**Figure 1. Report Structure**

Figure 1 shows the structure of the research report, that is divided into 6 sections. The first section is the introduction to the research topic. After the introduction, the second section of the report focuses on the literature review, that is divided into various sub-sections. Research Methodology is defined in section three. In the fourth section, gathered data from the survey is analysed. Analysed data and literature is discussed in the fifth section. The sixth section is for the conclusion of the research report.

## 2 Literature Review

In this section, a selection of literature is discussed, that examines academic sources (journal articles, e-books and other electronic resources) in relation to a range of research and interest. To overcome the deficiency of the traditional literature review, researched tried to cover all sources systematically. Figure 2 shows the literature map for this research.

A concept map is a way to show the literature topic or areas covered throughout the research and process of conducting the research (Hlee, Lee, & Koo, 2018). Literature map (Figure 2) shows that the research is divided into mainly two parts and then several themes and sub-themes. The first part focuses on complaints such as background, importance, reasons, traditional and modern way of complaining in the airline industry. The second part examines the role of social media in the airline industry for lodging complaints, social media platform used for file complaints, advantages and disadvantages for the airline industry and customers. Figure 2 shows the outline and foundation of the research. Every topic and every section are defined clearly in this part. Figure 2 is created by the researcher with the help of [www.coogole.it](http://www.coogole.it) online application.



**Figure 2. Literature-Map**

The core concept of the literature is customer complaint. This is clear from Figure 2 that literature focuses on two concepts. The first part represents the brief introductions with the complaints such as complaint definition, reasons for the file complaints, the importance of the complaints to the airline industry, complaint handling and way of lodge complaints. The second part presents the modern way of filling complaints. This second part focus on the role of social media in the airline industry as a complaint tool. This part also divided into several subparts such as social media platforms use as complaint tool in the airline industry, the impact of social media in the industry, impact on customers.

A protocol was created for search best and appropriate academic resources for this research. According to Kitchenham et al., (2007) a protocol defines the processes to choose literature for the research and mitigate the bias of researcher's potential. The protocol for this research is present in Table 1.

**Table 1: *Protocol for Literature Review***

<b>Background</b>	Social media and the airline industry are the primary focus of this study. The literature reviews address the importance of complaints and role of social media as a complaint tool, advantages and disadvantages for the customers.
<b>Research question(s)</b>	<p>Main research question</p> <p>1. What are the impacts of customers complaints about the airline industry made on social media?</p> <p>Sub Questions:</p> <ol style="list-style-type: none"> <li>1. Which platforms are used for complaints on social media?</li> <li>2. What are the advantages of social media to the customer to file a complaint?</li> <li>3. What are the disadvantages of social media to the customer to file a complaint?</li> <li>4. What is the impact of technology (social media) on customer complaint behaviour?</li> <li>5. What is the role of technology (social media) in WOM?</li> </ol>
<b>Search strategy</b>	OneSearch database from WINTEC digital library is used for finding literature reviews. Peer-reviewed journals articles and research papers with the English language and the publication date between the year 2014 and 2019 are used. The search terms are used from these databases: Airlines industry and social media/ Feedback/ Facebook/ IT disaster/ complaint/ customer dissatisfaction/ Communication/ customer loyalty/ WOM.
<b>Study selection criteria</b>	<p>Study selection criteria- peer-reviewed articles published after 2014</p> <p>Studies are included- research focused on platforms used for complaints in airline industry, social media and customer complaints, impact on customer and airline industry complaints through social media, customer complaint behaviour and service quality, complaint handling process and role of IT and WOM</p> <p>The study excluded the articles that focus on airline fares, staff, booking tickets online and refunds topic areas are excluded from this research.</p>
<b>Study selection procedures</b>	While researching the main topic was the central focus and a checklist used such as peer-reviewed articles more than 30 references, Articles contain more than 2000 words that published between the date 2014 and 2019, articles contain Airline and Social media keywords and meet the requirements. Some original documents that are published before 2014 also used for the research to understand the topic and research procedure in the depth.





Different social media applications are used by modern customers to file complaints and interact with other customers is examined in the 2.9.1 subsection. The positive and impacts of social media for the airline industry and customers are identified in the 2.9.2 and 2.9.3 subsections, respectively. All the sections and subsection and information gathered from literature is present in upcoming paragraphs. Before defining anything else, it is very important to know the formal definition of the complaint and its importance for the airline industry is.

## **2.2 Definition of Complaint**

A complaint is an expression of pain and dissatisfaction (Sang Yeal, Ji Young, Hongmin, & Jang Ho, 2019). Safitri, Basid, Tolle, and Ramdani (2017) state that a statement made by the complainant to a second party (company or organisation) as the defendant. The base of the statement can be money or property as recovery assets (p. 116). The core of the complaint is to recover customers' dissatisfaction into satisfaction.

### **2.2.1 Types of Complaints**

Upadhyaya (2013) state that there are two types of complaints in the airline industry Controlled and Uncontrolled. Controlled complaints can be controlled by the company such as flight postponement or late, bad behaviour of staff members, bad service during the flight or luggage problems. These problems can be easily handled and helpful to improve service for airline companies. On the other hand, uncontrolled is a situation that can never be handled by an airline company, for instance, technical error in the company's system and become the reason of flight delay, climate problems or bad weather condition. Sometimes some people make complaints about uncontrolled situations. Complaints regarding the uncontrolled situation are useless for the airline industry and not helpful to the industry to improve its services.

Genuine complaints are always helpful to enhance service quality. Therefore, some airlines have a feedback form, as well. These forms are helpful to a company to know their weakness and strengths of the company (Upadhyaya, 2013).

## **2.3 Ways of Lodging Complaints**

A way to express dissatisfaction to the company is called lodging complaint (He, Hu, Shi & Liu, 2014). The different ways for lodging complaint to the airline company are examined in this sub-section. Traditional and modern ways of the filed complaint are identified in this

section. He, Hu, Shi, and Liu (2014) state that face to face filed complaint method is using in past and present. There are several different methods used by customers to file their complaint to the airline company, are defined below.

## 2.4 Social Media

Social media allows online communications to its users with messages, images, videos audio and video calls (Obar & Wildman, 2015). Social media is internet based channel that allows large audience to interact with each other globally (Bayer, Trieu, & Ellison, 2020). In other words, the applications and websites that allows the people to share their stored and real time data with others, called social media.

Social media is based on 2.0 web-based technology that allows the users to swap their content (Primack et al., 2019). Social media become an essential part of contemporary living. People from every age group use electronic avenues and stay connected. In February 2019, 64% of people online used Facebook, 45% WhatsApp, 37% Facebook Messenger, 21% Twitter worldwide, based on 24,735 responses. According to the Statista prediction analysis (2019) in 2021, the social media will cross 3.02 billion monthly active users that are one-third of the global population. With the help of social media, people can interact with each other effortlessly, without social media that was impossible (Carlquist, Lee, Shalin, Goodman, & Gardner, 2018). Social media affects people behaviour because of maximum time spending on it (Hjorth & Hinton, 2019). Social media affect human's ordinary life along with consumer behaviour (Gleave, Welser, Lento, & Smith, 2009). Web 2.0 application tool makes the customer smarter for selection of a product or service. With the help of social media, people can check the company's review that are shared by other customers (Hodeghatta & Sahney, 2016). Jovevski and Vasilevski (2019) define that social media is a modern way to communicate and use of social media will increase in the future. According to Obar and Wildman (2015), the fast diffusion of web 2.0 functionalities, increase web users all over the world. Dropping online data storage cost increased the number of Internet user and brought together across the globe. Obar and Wildman (2015) state that the Internet and social media link people from across the world virtually. Social Media connect the customer and business directly. Social Media working as exchange information business to customer (B2C) and customer to customer (C2C) (Bigne, Andreu, Hernandez, & Ruiz, 2018).

He et al. (2014) state nowadays, social media is providing a new and massive platform to the customers for complaint. Online Social network has a fast speed for data spreading and mass of users that can interact with each other anytime and anywhere. Rapidly online social network became a crucial way for the customer to express an opinion for the product or complaints (p. 6039). Ramos, Lemanski, and Joon (2017) state that online reviews are used for the filed complaints direct to the company by dissatisfied customers. To increase customer satisfaction company comebacks to the negative reviews as a service recovery strategy (p. 42). Asatryan and Selase (2014) state that Social media has become very popular for sharing information these days. Social media is easy to access for everyone. People use social media to interact with the airline companies with messages, blogs, and videos. Airline companies use social media sites for marketing and share other information with the customer such as YouTube and Picasa. LinkedIn, Twitter, Facebook are very popular these days for communicating between business and customers.

Social media brings business and customers close. Customers are also very close to each other after social media involvement in a company. A business and its customers can easily interact with each other. On the other hand, customers can interact and can share a bad or good experience. Social media is very influential these days. People are making their decisions after reading comments of other people before choosing an airline. Thus, some people estimate the service of that airline company (Kietzmann, Hermkens, McCarthy, & Silvestre, 2015).

#### **2.4.1 Platform**

Different platforms of social media like Facebook, Instagram, YouTube, or twitter affects lives with the changing way of communication and influence people choice. (Alnsour, Ghannam, & Alzeidat, 2018). Jovevski and Vasilevski (2019) explain that 71% of Internet consumers were using at least one mode of social media in 2017. 22% US internet user post comments online and 32% user rated after service experience (Lazar, Ribak, & Davidson, 2020). The Internet provides a platform to the customer “one to many” and “many to many” communication around globally. Online feedback helps to build trust between customer and business and increase online marketplace growth (Lee & Cude, 2012). Many airlines are using different social media platform like YouTube, Facebook, Twitter, and blogging. These are an easy way to communicate with customers, therefore airline companies provide some

features to the customers like rate the services, chat room, blogs and email address through social media (Novani & Kijima, 2014).

#### **2.4.1.1 Facebook**

Facebook was launched in 2004 and 1.4 billion users monthly were active on Facebook in 2015. According to the Statista.com survey report (2019) in October 2019, Facebook has 245 billion monthly active users, that is 26.3% of the global population. Jovevski and Vasilevski (2019) state that in 2018, 2.62 billion people were using social media all over the world, even 2.46 billion in the year 2017. In the year 2018, Facebook had 1.86 billion monthly active users (p. 49). The airline industry uses Facebook to manage customer relationship, marketing of new promotions and communication. The number of fans on the Facebook page shows the popularity of the airline. People can send a message or call the company by using Facebook messenger. Dissatisfied customer upload videos regarding their bad experience on a personal account or public pages. People can leave comments and complaints on the official page of the airline, which visible for everyone (Grancay, 2015). According to Balaji et al. (2015), people can directly post their complaint on the airline companies' official page that will be visible to everyone. When people do not complaint or post on companies' official page but share with the friends through Facebook that works as e-WOM. People from every age group and gender like to use Facebook. Every minute 1,000,000 user logs in on Facebook. 52 % female and 48 % male users on Facebook (Lazar, Ribak, & Davidson, 2020).

#### **2.4.1.2 YouTube**

People use YouTube for watching and sharing videos. Despite this, people read other people's comments below the video. Four million five hundred thousand videos watched by YouTube user per minute around the world (Lazar, Ribak, & Davidson, 2020). Most airlines have their official channel on YouTube. Airline industry uses channels for special offers and marketing, but some angry customers write their complaints below the official uploaded videos. Some people share their experience through YouTube on their personal YouTube channel to make aware of the other customers (Zelenka & Hruska, 2018).

#### **2.4.1.3 Twitter**

Zelenka and Hruska (2018) state that Twitter can be labelled as an online listing tool due to allows only 140 words to share the experience. Therefore, twitter is one type of microblog.

Twitter works as an open decision platform for the customers to share their good or bad experiences with the companies or others. In the 2006, Twitter started and recorded, 288 million users activate monthly with 500 million daily posts, in 2015. In 2016, Twitter has 330million monthly active users (pp. 745-746). 87,500 users' tweet on Twitter globally per minute (Bayer, Trieu, & Ellison, 2020). Dissatisfied customer posts their complaint publicly on the Twitter. Customers and ccompanies use Twitter for the quick response due to its fast speed (Istanbulluoglu, 2017).

### **2.4.2 Impact on Companies**

With the help of social media, airline companies can easily identify the problem that exists in their services and utilize the data to recover upon weakness. Social media provide a channel to the companies to interact with dissatisfied customers and recover from service failure. Well managing customer complaints handling and recovery efforts can shine a limelight on greater customer service, that impact not only on the dissatisfied customer but also other customers (Stevens et al., 2018).

#### **2.4.2.0 Update Information**

Ater and Orlov (2015) define the use of the Internet has an impact on all types of businesses. The Internet makes industries more competitive. Airlines use the internet to provide information or update new services. People use the Internet to gather information about airlines such as comparing ticket prices, amenities and to check the other people's reviews (p. 180).

People use some social media sites to show their unhappiness with the company to provide negative comments publicly. Therefore the dissatisfied customer can create negative WOM that influence the other customer very quickly and can reason reduce of existing customers and loss the reputation of the company (Istanbulluoglu, 2017).

##### **2.4.2.0.1 Fast Complaint Handling Process**

Charoensukmongkol (2018) suggested that complaint handling process should be fast for airline companies. Fast and slow complaint handling process have a great impact on customer satisfaction and loyalty.

#### **2.4.2.0.2 Social Media Team**

Companies hire a Social Media team to handle their Social Media accounts. There are different sub-departments in a Social Media department; for example, the account handling team works differently from the Social Media enquiry team (Kaur & Kesharwani, 2018). Social media team collect data from social media and analysis the data. The collected data classify for predictive analysis and figure out the problematic area for best solution (Saranya, Ambhiha, & Thevahi, 2020). Most of the airline companies use social media for external and internal communication. External communication means interaction with customers and vendors. The internal communication means interaction within company's employees (Leonardi, Huysman, & Steinfield, 2013). Thus, every airline company must appoint a team for handle social media official account for the company.

#### **2.4.2.0.3 Fast Responses**

Companies offer online services and people also prefer online shopping. Therefore dissatisfied customers prefer online complaints compared to traditional complaints. People expect fast responses through online more than offline. Fast responses also impact on company's reputation in an indirect way. Therefore, the Social Media team should work and respond quickly to the customer (Lee & Cude, 2012).

A company can respond formally or informally to the customer's complaint. For the communication on Social media companies use formal language for the response to customers (Johnen & Schnittka, 2019). People love to hear back from companies (Saranya, Ambhiha, & Thevahi, 2020). Quick responses from companies to the customer have a positive impact on customer behaviour. Some customer become happy when companies give them their first reply rapidly. Customers feel at company want to listen to them and are keen to solve the customers' problem. That is the first level of satisfaction (Istanbulluoglu, 2017).

#### **2.4.2.0.4 Rumours and Fake News**

Fake news is created for intentionally misleading to others and spread wrong information. Fake news started in the early 18<sup>th</sup> century when Benjamin Franklin sent a fake letter to Captain Samuel Gerrish about cruelties that were committed by the British. The letter looked like a printed regular newspaper supplement. In reality no article was printed in the newspaper. According to the literature, Franklin gave birth to fake news (Okoro, Abara, Umagba, Ajonye, & Isa, 2018).

Fake news on social media spreads more quickly than real news and users have a vital role in spreading the fake news on social media. According to one study, 23% of users spread fake news on social media. Unluckily other users tend to believe in fake news due to a lack of confirmation and share fake news with their friends as well (Kim, Moravec, & Dennis, 2019).

#### **2.4.2.1 Positive Impact on Companies**

With the help of social media companies can easily identify problems that exist in their services and utilize the data to recover upon weakness. Social media provides a channel to companies to interact with dissatisfied customers and to recover from service failure. Well managed customer complaints handling and recovery efforts can shine limelight on greater customer service, that impact not only on the dissatisfied customer but also other customers (Stevens et al., 2018).

##### **2.4.2.1.1 E-Marketing**

Social media provides an e-marketing platform for airline companies. Companies always update their new deals or offer on their official social media's page, channel and accounts (Levy & Gvili, 2020). Social media helps the airline companies to understand the customers' likes and dislikes. Even airline companies' data analysis team analysis data for marketing and provide some offers to target population (Saranya, Ambhiha, & Thevahi, 2020). Moreover, satisfied customers leave positive comments for airline companies on social media sites that work as automatic marketing for the companies (Bigne et al., 2018).

Social media is providing two-way communication between consumer and business. Social media can make a long-lasting relationship between customer and business. Therefore, companies should use social media seriously as well.

##### **2.4.2.1.2 Transparency**



Joung et al. (2019) state that the discovery of cellphone and other communication devices (Tablets, laptops and computes) and the Internet increase E-WOM (electronic word of mouth) in business and provide the opportunity for a customer to express their opinion about a company or product. Companies collect and save customers reviews and complaints through web harvesting methods that enable the companies to save automatic and scanning customer complaints from web pages. Thus, companies allow the analysis of a vast amount of data and can understand the customers need in a short time. People make complaints through internal and external channels. Through the internal channels', companies received direct complaints from customers like services centres, mobile applications, social media official pages and websites. On the other hand, the company received customer complaint through third parties such as complaint web pages created by the third person, complaint social media pages, customer review applications or customer help agencies.

#### **2.4.2.1.3 Direct Interaction**

Social Media provides a platform for the customer to interact with the companies. Third-party and third person is not needed to communicate with the airline company through Social media because it provides direct interaction platform to the customer (Primack et al., 2019). Companies can immediately provide the solution to the customer through social media. American Airline used Tweeter when a family was about to miss their flight. The airline company immediately tweet publicly on its official Tweeter account the gate number for the family for next flight (Grégoire, Salle, & Tripp, 2015). Family and staff saw the post and followed the tweet. Thus, through the social media airline company solved the problem within hours (Grégoire, Salle, & Tripp, 2015). Everyone noticed that company respond quickly and solve the problem, that increase the customer loyalty and improv the company's image.

#### **2.4.2.1.4 Positive Impact on Other Customers**

The dissatisfied customer leave comments online more than satisfied customers. Usually, the dissatisfied customer leaves negative comments and review on social media that play an important role in other customers post-purchase decision. According to one study, four customers out of five changed their purchase decision after reading comments online (Stevens, Spaid, Breazeale, & Esmark Jones, 2018).

#### **2.4.2.1.5 Impact of Positive e-WOM**

According to Yang and Dong (2018) oral and non-commercial communication between person and person, regarding a company, service or brand, called Word of Mouth (WOM). Social media provide a platform to share the content to the customers about a company or product, that called eWOM (Levy & Gvili, 2020). Normally, eWOM involves sharing the information regarding seller and experience with company or product in online environment (Chu and Kim 2018). E-WOM has the power to change the other customer decision through a positive and negative conversation about a company or product. Yang and Dong (2018) describe online review indirectly gives the companies or product information to the other customers. Positive reviews increase the certainty of the other customers on the product or company (p. 100).

WOM occurred between a small group of people like relatives and family members. People share their personal experience about the company or services with others that consider as reliable or trustworthy. WOM has a significant impact on the receiver because the speaker always shares the information that never provides by the company. Thus, WOM affects the listener's decision making for next time about the company. WOM always effective more than commercial advertisement and can be positive or negative. Excellent experience with any company or service called positive WOM. On the other side, the bad experience with any company or service called Negative WOM. The satisfied customer always uses good words for the company and recommend to others to use the same company. The satisfied customer chooses the same company for re-purchase. In contrast, the dissatisfied customer always uses wrong words for the company and advice others never to choose the company. In short, a satisfied and dissatisfied customer always impact on other customers with the WOM (Kaur & Kesharwani, 2018).

Posting comments, reviews or opinions about a product or company on social media sites, review websites and customer discussion form is part of e-WOM (Kaur & Kesharwani, 2018). Zhou et al. (2018) state that the effect that online reviews have on effect other customers decisions for their next purchase. On the other hand, online reviews help companies to know what consumers are thinking about their services and what should improve for next time in providing services to prevent complaints. Thus, e-WOM is helpful for both business and customers to get real information (p. 512).

#### **2.4.2.2 Negative Impact on Companies**

Social media has lots of negative impacts and demerits for airline companies (Primack et al., 2019). The demerits are explained in the upcoming sub sections.

##### **2.4.2.2.1 Increases Competition**

Social media has increased the competition between airline companies. Before the social media, every company provided its official websites, but now companies have to provide Facebook office pages, YouTube channels, Instagram profile as well. If any company did not have any social media official accounts, then customers can be attracted to the other companies (Kaur & Kesharwani, 2018). If any company failed to satisfy its customer with the services or solutions of the problem, then competitors would take advantage of that incidence. If the customer complaint lodged through social media publicly then it is open invitation to the competitors to take advantage from that situation. Anthony Bourdain and American Airline incidence is best example of this incidence (Grégoire, Salle, & Tripp, 2015). Anthony Bourdain tweet on his Tweeter account “What does ‘special situation’ mean in airlines speak? Ain’t nothing special about late departure,” due to flight delayed (Grégoire, Salle, & Tripp, 2015). American Airline did not response his message, but Virgin Atlantic took advantage from this opportunity. Virgin Atlantic offered free trip to Anthony Bourdain and proved American Airline had poor service with careless company’s behaviour (Grégoire, Salle, & Tripp, 2015). Thus, social media increases the competition in the market.

##### **2.4.2.2.2 Useless Complaints**

Companies received lots of and different types of complaints daily. Some complaints are useful for companies but some useless. Useful complaints can help companies to improve its services. Social media provide a chance for everyone to file their complaints. Dissatisfied customers like to file their complaints to the company (Saranya, Ambhiha, & Thevahi, 2020). Some people never think this complaint is genuine or not. Uncontrolled complaints are a good example of useless complaints. Social media increase the chance of received useless complaints (Ramos et al., 2017). These useless complainants for uncontrolled situation waste the time of social media team and then complaint handling management.

##### **2.4.2.2.3 Negative Impact on Other Customers**

Angry customer upload everything on social media with evidence like service failure photo or screen short of dissatisfied responses from airline company. Thus, nothing is private between the customer and company in today's world. Negative reactions and staff misbehave with the customer go viral quickly on social media, that impact negatively on other customers (Melancon & Dalakas, 2018). Anyone can easily access the official page and website of the companies. If the staff member would not reply quickly or ignore the negative comments or complaint that represents the company is not serious about its customers. If the company responses quickly to the customer, that represents company eager to listen to its customers' problem and want to make them satisfied (Kim, Kim, & Shin, 2015). Thus, quick responses to the customer enquiry and problem impact positively and negatively to all customers.

#### **2.4.2.2.4 Customer to Customer Communication**

Customer to customer communication (C2C) facility is provided by the social media platform and known as an online community (Zhu, Chang, & Luo, 2016). Customer or group of customers, from the same company, can share their experience freely on social media from all over the world (Zhu & Chang, 2014). Sometimes dissatisfied customer never provides any chance to the company to fix the problem and post wrong words for the company. For example, a dissatisfied customer posted a statement on Twitter for British Airways "Don't fly @British Airways" in September 2013, due to his lost luggage (Grégoire, Salle, & Tripp, 2015). The person did not make a complaint to the airline company but directly tweet bad words for the company. Customer from all over the world sees that post that affects the company's image (Grégoire, Salle, & Tripp, 2015). Thus, customer to customer communication platform creates problems for the companies' and affect customers' purchase decision.

#### **2.4.2.2.5 Impact on Reputation**

Positive and negative comments on companies' official social media account or channel, affect the companies' reputation because of all the comments visible for every customer (Benitez, Ruiz, Castillo, & Llorens, 2020). If companies use social media inappropriate way that can increase companies reputation and customer loyalty (Triantafillidou & Yannas, 2020). If any customer post wrong comments on the company's social media account, other people would easily trust on that, because every customer does not read the messages and news that published externally from social media. Customers notice everything from social media site like complaint and response time of the airline company and solution of the

complaint (Melancon & Dalakas, 2018). Thus, everything posted on social media affects the company's reputation.

#### **2.4.2.2.6 Negative e-WOM**

Negative e-WOM spread quickly more than positive (Sari & Alilkilic, 2016). Zheng et al. (2015) state that sometimes, the service provider failed to provide the expected services to the customers that can be the reason for the negative WOM. Negative WOM can destroy the company image. Nowadays, negative eWOM can create a big problem for the company. Pfeffer, Zorbach and Carley, (2014) gave an example, 22<sup>nd</sup> November 2011 Qantas Airline started a promotion through Twitter and asked people to share their story with the company. The company received thousands of negative tweets and bad user stories. These negative WOM on twitter damage the company's image outside Australia (p. 119). Thus, negative eWOM on social media is a big problem for the company.

### **2.4.3 Impact on Customers**

Social media has an impact on customers and companies (Alnjadat, 2019). Impact of Social Media on customers to file their complaints are examined in upcoming sub-sections.

#### **2.4.3.0 E-WOM**

Sari and Alilkilic (2016) state that share the experience with other customers electronically called e-WOM. If the company provide the best services to its customers and solving the customers' complaints on time, increases the positive WOM or e-WOM. Satisfied customer recommends the company to the others that decrease negative WOM. Today's people can spread e-WOM with the third party or unknown persons as well, with the help of social media. Dissatisfied customer takes help from social media to raise their voice against the airline company. Thus according to the complaint handling theory problems should be solved quickly because delay in responses or negative response to the customer can lead to customer switching behaviour (Langaro, Loureiro, & Soares, 2020). Xun and Guo (2017) explain that e-WOM has impacted the revenue of the company. Positive word of mouth increase customer loyalty and number of users, and negative word of mouth harms the company. Dolan, Seo, and Kemper (2019) state that positive WOM or e-WOM effects other dissatisfied customers' as well. If someone faced problem during flight and decide to post negative reviews or

complaining through social media, but after views, several positive comments decision can be changed of the customer (Zheng et al., 2015).

#### **2.4.3.0.1 Personal and Publicly Complaints**

Social media provide a platform for customers publicly and personally. Personally, complaints are direct communication with the company like; complaint forms and online chat. Personally, the complaint does not become visible to everyone, and the only company can see the content. Publicly complaint does visible for everyone. Customer post good or bad experience on the company's official page (Dolan, Seo & Kemper 2019). Trivial complaints that received through social media, companies like to solve publicly. The serious complaints received through social media companies like to solve personally (Grégoire, Salle, & Tripp, 2015). For example, if a company receive a serious complaint through social media from an angry customer. Then the company leave a message to the customer to contact them personally through email, face to face or phone call. After the solution of the problem company post, the problem is solved (Grégoire, Salle, & Tripp, 2015). Thus, some publicly lodged complaints solved personally but some personally lodged complaints showed publicly by airline company.

#### **2.4.3.0.2 Direct Interaction Between C2B and C2C**

C2B interaction means the customer to business communication, and C2C stands for the customer to customer interaction. Social media provide the platform to the customer to interact with the company for complaint and other customers to eWOM (Naylor, 2016). Social media provide a chance to interact with the business to customers and customer to customer. Customer can share their experience with other customers even they do not know who they are (Jovevski, 2019).

#### **2.4.3.0.3 Replaced Traditional Method**

Social media replace the traditional complaint method with modern. Some traditional methods are using for complaints but in a modern way (Hjorth & Hinton, 2019). For example, people like to file their complaint face to face, but now people do not have any need to meet any manager and wait for him/her. People have to fill out a complaint form or got to the company's office and shared the problem with any employee's verbally (Xun & Guo 2017). Nowadays, customers do not want to waste their time. Therefore, they adopt an easy

way to lodge their complaint. People do not like to write letters to the company, personally meeting with the staff and text messages to the company. Through social media, people do not need to go anywhere and wait for a response from the company (Langaro et al., 2020). Thus, social media replaced all traditional method and provided a modern and easy way for the customers to file their complaints.

#### **2.4.3.1 Social Media Beneficial for Customers**

Jovevski and Vasilevski (2019) state that the use of social media has a massive influence on people's daily lives, behaviour and way of communicating. Social media has also changed the flow of communicating with business and customers. Today customer and company have direct communication due to the Internet and social media. Social media and the Internet make the relationship deeper, closer, and long-term between customer and company (pp. 48-49).

##### **2.4.3.1.1 Anytime Complaint**

Safitri et al. (2017) state customers can lodge their complaints anytime and from anywhere. For example, a customer posted a picture on Instagram against Delta Airline, because of luggage with a broken handle. The dissatisfied customer clicked the photo at the same time and post on Instagram (Grégoire, Salle, & Tripp, 2015). Thus, customer can complain anytime from anywhere on social media by using their devices. When a customer filed a complaint through social media, the content is visible for everyone. Everyone will be aware of the same issues and problem they can face in future.

Customer does not need to wait for working days to file their complaints. With the help of social media, customer can file their complaint during the day, night, weekend, public holidays (Tajudeen, Jaafar, & Sulaiman, 2016). Social Media provide a platform for customers to interact with any company at a global level. Customer from any location can file their complaint direct to the company (Choi, Seo, & Yoon, 2017).

##### **2.4.3.1.2 Awareness**

Positive and negative comments on social media indicate a company's services quality (Zheng, Youn, & Kincaid, 2015). When any customer posts any review on social media regarding any company, that helps other customers to the quality of the service or company. These positive and negative comments on social media make aware the other customers

about a product or company (Arokiasamy, Kwaider, & Balaraman, 2019). The posted comment keeps all customers aware of the quality of the product and the company. A new customer can make a judge and expectation from the company (Jawabreh, Allahham, Alrjoub, & Ahmad, 2012). Due to social media customer does not need an agent to guide them or any person to make them aware about the policy or current affairs of any company (Jawabreh, Allahham, Alrjoub, & Ahmad, 2012). Social media share real-time data worldwide, and accurate platform for sharing information, keep update and decrease the communication crisis between business to consumers and customer to customer (Arokiasamy, Kwaider, & Balaraman, 2019). Thus, with the help of social media customer able to share their experience globally, that help other customers and secured them the false claim of companies.

#### **2.4.3.1.3 Show Dissatisfaction**

People who do not receive a satisfactory reply or solution from the company may easily show their dissatisfaction or unhappiness to the companies. People can post their reviews to official pages and channels easily showing their unhappiness to the company (Stevens et al., 2018). Social media provides a second chance to dissatisfied customer to reach their voice to the company.

#### **2.4.3.1.4 The easy and cheapest way**

According to Balaji et al. (2015), social media is the cheapest and easiest way to file the complaints. Majority of dissatisfied customer never complaint to the company because of the high cost and lack of knowledge (Saranya, Ambhiha, & Thevahi, 2020). Social media is available free of cost, a device (mobile phone, tablet or computer) and internet connection must work for it. No advance knowledge is must for using a device like mobile phones and social media. Therefore, for complaining through social media: money, knowledge and skills do not matter (Stevens et al., 2018). Customer must go to the companies' official page to lodge their complaint. This is an effortless and simplest way to file complaints (Langaro et al., 2020). Therefore, people like to use social media to file their complaints.

#### **2.4.3.1.5 Strike Back**

Gregoire, Ghadami, Laporte, Senecal, and Larocque (2018) state that some people never complain but take revenge from the company through post negative review photos or videos of service failure on social media. Sometimes the photos or videos go viral that damage the



company's image (Zhu & Chang, 2014). Therefore, companies pay huge amount of money to the customer. The dissatisfied customer, who has lost the hope of any compensation from an airline company, can use social media for strike back against the company (Triantafillidou & Yannas, 2020). Thus, social media is also providing a secondary complaint tool to the dissatisfied customer. If customers dissatisfied from another complaint methods, then they can use social media as the second option.

#### **2.4.3.1.6 Provide Chance for Re-complaining**

Complaining through social media provides an opportunity for the customer to expect remedy of the service failure and satisfaction from the service. Balaji et al. (2015) declare private complaining has a lower chance of satisfaction in comparison to publicly. Social media provide multiple chances to dissatisfied customers to re-complaint and show unhappiness to the company (Naylor, 2016). If the customer does not get any satisfying responses or solution from an airline company, then the customer can file complaints multiple time. There is no limit to file a complaint through social media (Langaro, Loureiro, & Soares, 2020). A customer has multiple chances to show its unhappiness to the airline company in low budget with limited resources.

#### **2.4.3.2 Social Media's Drawbacks for Customers**

There are some disadvantages for companies. Companies are facing difficulties from social media (Hodeghatta & Sahney, 2016).

##### **2.4.3.2.1 A long wait for Response**

The big disadvantage of the file complaints through social media, is customer have to wait for a long time forget responses from companies (Levy & Gvili, 2020). No doubt, social media is available free of cost, but customers' does not free for waiting for a long time. After file complaint through social media, the customer must stay engaged with social media. The complaints result does not receive immediately to the customers (Zhou et al., 2018).

##### **2.4.3.2.2 Auto-Response**

After online file complaints, some company's quick response to the customer but automatic (Naylor, 2016). Companies want to show that the organization is very responsive and caring to the customers. Therefore companies send an auto-reply to their customers (Saranya, Ambhiha, & Thevahi, 2020). In some cases, automated responses can be worse than a late

reply. There is a real example: American Airlines decided to quick responses to customers with automatic responses. The dissatisfied customer leaves negative comments like “American Airline is the worst airline in the world, would suggest to everyone never travel in the airline”, then the customer will get a quick response from the company “Thank you for your support”. Thus, automatic messages can be hilarious at that moment, and the customer can be more aggressive. Auto responses can be the reason for negative WOM or e-WOM (Melancon & Dalakas, 2018).

#### **2.4.3.2.3 Delete and Hide Comments**

Negative comments on social media like Facebook and Twitter at the official account of the company visible to everyone. Therefore, some companies delete or hide negative comments from their account, to prevent negative WOM (Langaro, Loureiro, & Soares, 2020). Deleted negative comments hurt dissatisfied customers. The customers do never receive any solution for their problem. Moreover, other customers remain unaware of the problem and the company’s cheap services (Obar & Wildman, 2015). Companies delete comments because fair to lose customer loyalty (Zhu, Chang, & Luo, 2016). Due to delete or hide negative comments from social media, some complaints and weakness of the companies never come in front of other people (Melancon & Dalakas, 2018).

#### **2.4.3.2.4 Companies are not Serious**

Jovevski and Vasilevski (2019) companies are not listening to gravely customer voice on social media. Some companies ignore the comments and complaints on social media (p. 49). Some companies send a reply to the customers connect them personally by phone call or emails (Leonardi, Huysman, & Steinfield, 2013). That shows the company does not like to provide any solution to the customer through social media.

#### **2.4.3.2.5 Impact of Social Media Account**

When airline companies received a complaint through Social Media, first of all, companies check how many followers that person has. Through this process, companies estimate, the received complaint should be solved first or latter (Hjorth & Hinton, 2019). If companies receive a complaint from any celebrities account, the complaints would be solved quickly. The reason is a huge fan following of the celebrity can spread negative eWOM quickly (Lazar, Ribak, & Davidson, 2020). That impact company’s reputation. Kevin Smith’s case is the best example of this. February 2010, the famous filmmaker Kevin Smith was kicked off

by Southwest Airline (US) for being obese (Gunarathne et al., 2018). He sent out a tweet on Twitter with his 1.6 million followers and received the response from Airline. The airline company solves the crisis within 16 minutes. If any ordinary person tweet like this and that was possible to get responses within a few minutes (Gunarathne et al., 2018).

In the 2008 Dave Carrol found his guitar damaged during baggage handling in United Air Lines flight. He complaints face to face several times to the company. He did not get any satisfying responses and any process to proceed. The frustrated Carrol posted a video against in the airline in the form of the music video in July 2009 about the bad experience. Finally, the airline offered Carrol to compensate for damage guitar and re-examined the policy. Then, Carrol released two more songs “United breaks the Guitar 2” in August 2009 and “United breaks the guitar 3” in March 2010 (Tripp & Gregoire, 2011). Dave was not a celebrity; therefore, the company took a long time to solve his problem. These two cases show that celebrity account and common person account matter a lot for an airline company to solve the company.

## **2.5 Conclusion of the Literature Review**

The complaint shows the service failure of the company. File the company to the company to prove a second chance for the company to recover its service and make their customer happy. In the airline company, only conditional companies can be solved. File complain about an uncontrolled situation can never be solved by the airline company. Reasons can be different to file complaints. These complaints can be very useful for the company because the company identify public expectation. After receiving any complaint, companies handle the customers’ complaint by using some strategies. Complaint management has an important role in solving the customers’ complaint on time. Therefore, people use different methods to reach the company and want satisfaction from the company. Nowadays, people do not have enough time to go to the companies’ office to file their complaint. Therefore, people use new technology and devices for direct communication with the company. People use social media to file their complaint in today's world. Facebook is the most popular social media platform, that is used by the customer to reach out company and other customers. Use of social media for complaints has some pros and cons to the airline industry and customers. Customers use social media to share their good and bad experience with other customers. In short, social media has a great impact on the airline industry and customers.

### **3 Methodology**

According to Surbhi (2018), the study of procedures, that is used to find out the answers to the research question, is called research methodology. The research methodology is coupled with examination and analysis of used methods for research systematically, for finding and conclusions are acceptable.

For this research, science and communication theories are used to understand the topic, find out the answer to research questions and relation between airline business and customer (B2C). Modes of communication have changed with time. New technology has changed the relationship between customer and business and has created new challenges for companies. All these aspects are examined in the research. Research design, the objective of research and methods are discussed. The main research question and sub-questions are defined in subsection 3.3.1. Literature peer-reviewed articles are used as secondary data for the research and conduct an online survey for gathered primary data. Survey questions are presented in the appendices section 10. The research is not focused on booking tickets online issues, refunds from the companies and the role of travel agents in the airline industry. The research covers only direct public communication between company and customers and its impact on other people.

#### **3.1 Research Design**

Research design describes the procedure for understanding and knowledge about a certain problem. For the same research, multiple results can be obtained by using different research methodology and design (Ismail, 2014). For gathering data and enhance the understanding for research topic the three steps are followed for this research such as: understand the question, collect data for the answer of the research question and use that data to find out the solution. For this research, the researcher found the topic for research, then collect peer-reviewed literature articles, then denote the purpose of the research, gathered data through a survey, analyses the gathered data and made a research report. For this research, the quantitative research method is used.

### 3.2 The Objective of the Research

The objective of this research is to investigate the impact of customer complaints made on social media for airline companies. Except this, the research is focused on the following objects:

- The impact of customers' complaint on an airline company
- Different ways of lodge complaints
- Use of social media as a complaint tool
- The most frequently used social media site for file complaints
- Benefits of social media as a complaint tool for the airline industry and customer
- Impact of positive and negative reviews on social media on airline company
- Use of social media for positive WOM and negative WOM
- Common complaints about the airline industry and reasons for these complaints
- Drawbacks of social media as a complaint tool for the airline industry and customer

### 3.3 Research Questions and Hypothesis

In this subsection, the research question, hypothesis and theoretical framework are presented. The research question and sub-questions, theoretical framework and hypothesis are presented in the upcoming subsections. The one main question and five sub-questions created to find the best result of the research. The five sub-questions help to find out the answers to the main research question.

#### 3.3.1 Main Research Question

Research questions for this research report are randomly developed that helps to answer the main research question.

MQ1. What are the impacts of customers complaints on the airline industry, filed through Social Media?

Sub Questions:

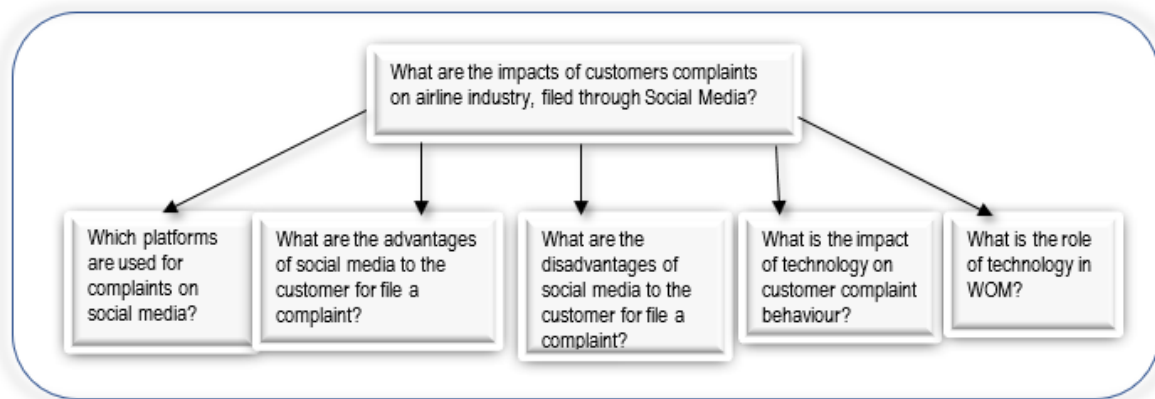
SQ 1. Which platforms are used for complaints on social media?

SQ 2. What are the advantages of social media to the customer to file a complaint?

SQ 3. What are the disadvantages of social media to the customer to file a complaint?

SQ 4. What is the impact of technology (Social media) on customer complaint behaviour?

SQ 5. What is the role of technology (Social Media) in WOM?



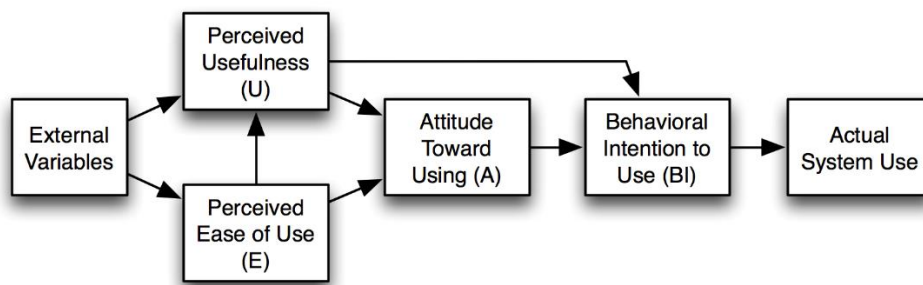
**Figure 3: Research questions and sub-questions**

The main research question aims to examine the role and impact of social media in the airline industry. The first sub-question helps to explore the Social Media websites by customers. The second sub-question helps to find out the benefits to use Social Media for the customer and airline industry as a complaint tool. The third sub-question helps to examine the demerits of Social media to the customer and airline industry. The fourth sub-question helps to examine the impact of technology on customer complaint behaviour. The fifth sub-question helps to examine the role and impact of technology in WOM for customer and industry.

### 3.3.2 Research Model

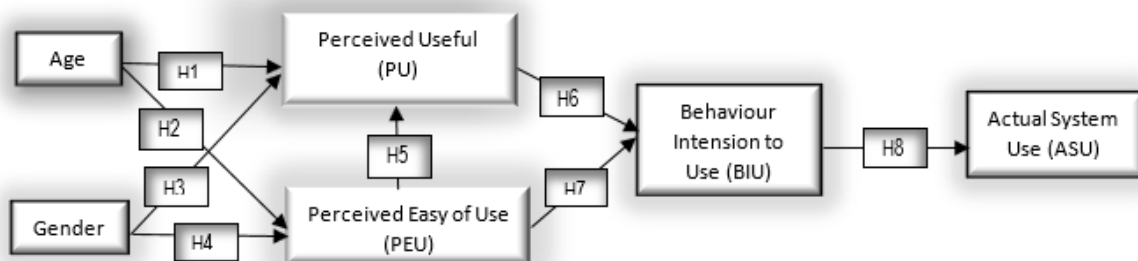
Normalini (2019) defines the Technology Acceptance Model (TAM) as a widely used model for explaining technology use behaviour. Davis introduced the TAM first time. TAM is helpful for prediction and explanation and identifies for the particular system would acceptable or unacceptable for the users. In this model, Perceived Useful (PU) shows the performance, efficiency and productivity of the task. Perceived Ease of Use (PEU) represents the degree to which a customer supposes the specific system to be effortless.

TAM helps to predict and understand the probability of adopting and perception of using the system. TAM is an appropriate model for identifying social media is utilized as a complaint tool for the customers (Ghani, Rahi, Yasin, & Alnaser, 2017). Therefore, the researcher selected and used TAM for this research. The original TAM is presented in Figure 7.



**Figure 4: Technology Acceptance Model (TAM) (Davis, Bagozzi, & Warshaw, 1989)**

Figure 7 represents the original TAM as a theoretical framework of research. External variables would identify through TAM and impact on PU and PEU. After this, PEU has a positive impact on PU, also identified through the research. PU and PEU impact on BIU will be examined, and ASU also identifies during the research. With the help of the original TAM new modified model is created for this research, represented in Figure 5.



**Figure 5. A Modified TAM Model (Researcher's work)**

Figure 5 represents the theoretical framework used for this research. There are two external variables. The first variable is age and the second gender. Both are independent variables. The first variable, age represents the age groups of the participants. The second variable is the gender that represents the gender of participants. In this research, eight directional hypotheses are tested through different variables.

In this research, PEU represents the degree to which social media is easy to use for the customer as a complaint tool for the airline industry. PU represents how much social media is used by customers and the airline industry as a complaint tool. BIU represent the intention of using social media by customers and the airline industry. Finally, ASU represents what the

actual system is used for complaints by customers and the airline industry for responses. The role of social media to increase the performance and efficiency between customers and the airline industry is examined in this research.

### **3.3.3 Hypotheses**

According to Leavy (2017), a statement that predicts how a variable relates and affects each other and will be tested through research are called hypotheses. There are two types of variable tested during hypotheses: dependent and independent variables. Kaur (2017) states that hypotheses are the belief of the researcher that what will be investigated in the research and hypotheses also forecast about the connection among two or more variables. In a quantitative approach, hypotheses support to critical thinking and make it easy to understand and explain what is being tested. There are two types of hypotheses directional, and non-directional hypotheses. The directional hypotheses show the direct relationship between variables. These terms show relationships can be higher, greater, positive or negative. Directional hypotheses are always written in the form of a statement, that shows the influence of an independent variable on a dependent variable. On the other hand, non-directional hypotheses show the relationship between variables but never forecast the quality of direction.

For this research, eight directional hypotheses are created. These are:

H1- Age has a positive impact on perceived usefulness.

H2- Age has a positive impact on perceived ease to use.

H3- Gender has a positive impact on perceived usefulness.

H4- Gender has a positive impact on perceived ease to use.

H5- Perceived ease of use has a positive impact on perceived usefulness.

H6- Perceived useful has a positive impact on behaviour intention to use.

H7- Perceived ease of use has positive impacts on behaviour intention to use.

H8- Behavioural intention to use has positive impacts on actual system use.

Hypotheses 1 (H1) expresses the relationship between age and the positive impact on perceived usefulness. H1 shows a particular age grouped people perceived social media useful for file complaints to the airline companies. According to Carlquist et al. (2018),



people from all age groups use Social Media. Which age grouped people perceived Social media is useful for filed complaints, examined through survey questions. Hypotheses, 2 (H2) represents the relationship between age and positive impact on perceived ease of use. H2 predicts that particular age grouped has a positive impact on perceived social media ease for use as a complaint tool. H2 shows people from the same age group perceived Social media is easy to use for complaints. The age group is identified in the survey. Hypothesis 3 (H3) shows the relationship between gender and that has a positive impact on perceived usefulness. H3 forecasts that specific gender has a positive impact on the perceived usefulness of social media for complaints. H3 shows specific gender perceived social media useful for file complaints. Which gender perceived social media is useful examined throughout the survey. Hypotheses 4 (H4) shows the relationship between gender and has a positive impact on perceived ease of use. H4 predicts that people from a specific gender have a positive impact on perceived social media ease of use for filing complaints. Gender is examined in the survey. Hypotheses 5 (H5) represents the relationship between perceived ease of use, which has a positive impact on perceived usefulness. H5 predicts that social media perceived ease of use has an impact on social media usage for filing complaints. Hypotheses 6 (H6) shows relationships between the perceived usefulness and positive impact on behavioural intention to use. H6 predicts the social media perceived usefulness for the complaints tool has a positive impact on behavioural intention to use social media. Hypotheses 7 represents that perceived ease of use has positive impacts on behavioural intention to use. H7 predicts that social media perceived ease of use has a positive impact on behavioural intention to use social media for complaints. Hypotheses 8 shows the relationship between behavioural intention to use has positive impacts on actual system use. H8 predicts that the behavioural intention to use of social media has a positive impact on actual system use for file complaints about the airline industry.

### **3.4 Hypotheses and Research-sub Questions**

Table 8 shows which hypothesis based on particular research sub-question.

Table 2: *Link Between Research Sub-Questions and Hypothesis*

<i>Sub-Question</i>	<i>Hypothesis</i>
<i>SQ1.</i>	H1, H4
<i>SQ2.</i>	H2, H3, H5
<i>SQ3.</i>	H2, H3, H5
<i>SQ4.</i>	H6, H7
<i>SQ5.</i>	H8

Table 2 shows the links between research sub-questions and Hypothesis. The first column of the table represents the research sub-question numbers. The second column of the table represents the Hypotheses number. Table 8 represents which hypotheses are influenced by which research sub-questions.

### 3.5 Hypothesis, Literature Reviews and Research Questions

Table 3 represents the literature reviews and survey questions based on the research question and sub-questions.

Table 3: *Link Between the Research Questions, Literature Reviews and Survey Questions*

Research Question	Literature Review	Survey Question
MQ 1	2.4, 2.5, 2.6, 2.7, 2.8, 2.9	Q1, Q2, Q3, Q4, Q5, Q6, Q7, Q7.3
SQ 1	2.9, 2.9.1, 2.9.1.1, 2.9.1.2, 2.9.1.3	Q7.4, Q7.4a, Q7.4b, Q7.4c, Q7.4d, Q7.5, Q7.5a, Q7.6, Q7.7, Q7.8, Q7.9a, Q7.11
SQ 2	2.9.3.1, 2.9.3.1.1, 2.9.3.1.2, 2.9.3.1.3, 2.9.3.1.4, 2.9.3.1.6, 2.9.3.0, 2.9.3.0.1, 2.9.3.0.2, 2.9.3.0.3,	Q7.9, Q7.10, Q7.11, Q7.12a,
SQ 3	2.9.3.2, 2.9.3.2.1, 2.9.3.2.2, 2.9.3.2.3, 2.9.3.2.4, 2.9.3.2.5	Q7.9, Q7.10a, Q7.11, Q7.12a,
SQ 4	2.6, 2.6.1, 2.6.2, 2.6.3, 2.7.1, 2.7.1.1, 2.7.1.2, 2.7.1.3, 2.7.1.4, 2.7, 2.7.2, 2.7.2.1, 2.7.2.1.1	Q7.9, Q7.9b, Q7.12a
SQ 5	2.8.2, 2.8.2.1, 2.8.2.2, 2.8.2.4	Q7.9, Q7.13

Table 3, the first column represents the research question and sub-questions. The second column shows the literature review with their section number and the third column, the survey questions. The purpose of the table is representing the literature review. Survey questions are based on the research question and sub-questions, that helped to conduct the research systematically.

### 3.6 Research Tool & method

An online survey was used for gathering information for the research because it is the best way to obtain relevant data on a low budget. The survey of 20 questions was conducted to retrieve the responses for four weeks. Qualtrics online survey tool was used for this survey. The recorded data were analysed for the analysis. An online link was created to share with all participants was sent to participants to gather data.

TAM was used as a research method. Two variables and 8 hypotheses has been created with the help of TAM to investigate the topic.

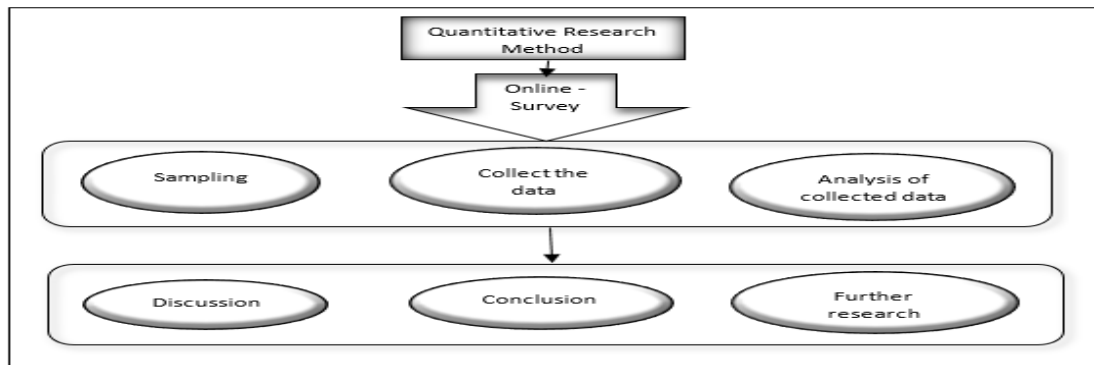
### 3.7 Research Approach

According to Leavy (2017), approaches are the structure of the research, like architecture structure for a building. According to him, there are three different types of approaches used for researches. These approaches are different from each other by their design. For example, an architect of the building and an architect of a house is different from each other. Similarly, approaches are different. These three approaches are Quantitative, Qualitative and Mixed Methods.

Creswell (2013) stated that the research approach is the procedure and planning for the research that expands the methods of research in detail and conducts analysis and data collection. A research approach contains overall decisions, philosophical forecast, a data collection research method and investigations. The choice of the approach should be based on the research problem being addressed. There are three different types of approaches. The first is qualitative research. The second is qualitative research. The last is mixed-method research. In the quantitative research numbering data analysis and identify the relationship among the variables.

To sum up, there are three different types of approaches that are commonly in use for research studies. The quantitative analysis examined the relationship between the variables. This research is based on the survey's numbering data. Therefore, a quantitative approach is best for this research. For this research and literature review, 65 journals articles are included. After the study of the articles and research papers, the researcher became able to do this research. In Table 1, data source and all documentation, that are used during research are represented. Figure 6 represents the research process with a quantitative approach to analyses

the data.



**Figure 6. Research Process**

### 3.8 Population

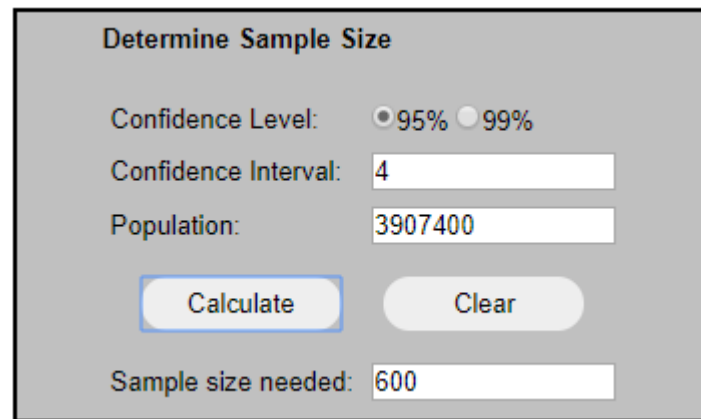
The target population was six hundred people for the survey and data gathering. The focused community for data gathering was people over 18 years who had some experience with domestic or international flights. According to StatsNZ (2019), the official website of the New Zealand government, the total population of New Zealand is 4957400. Still, people who have aged over 18+ can only participate in this survey. Therefore, 3907400 population was used to determine the sample size.

### 3.9 Sampling Method

The convenience sampling method (Marshall, 1996) used for this study is a nonprobability sampling.

### 3.10 Sample Size

In quantitative research, two measures affect the accuracy of the data. The first one is the confidence level and the second confidence interval. These both are necessary for determining sample size. The confidence interval represents the accuracy of an estimate. The confidence level expresses the true percentage of the population pick an answer lies within the confidence (J. M. Maher, Markey, & Ebert-May, 2013). For the sample calculation, an online tool is used under the website <https://wintec.au1.qualtrics.com>. The confidence level 95% and confidence interval 4, over the 3907400 population. The image with sample size is given below in Figure 7.



**Determine Sample Size**

Confidence Level: ☒ 95% ☐ 99%

Confidence Interval:

Population:

Sample size needed:

**Figure 7. Sample Size Determination (Source: Creative Research System)**

### 3.11 Reliability

In basic terms, research reliability is how much research strategy produces steady and predictable outcomes (Golafshani, 2003). For this research, multiple-choice answer and single choice answer formed questions are used. After developing the survey questioner, all questions were checked by the supervisors to prevent the wrong explanation of the question-wording.

### 3.12 Validity

Validity is significant because it figures out what survey questions to utilise and guarantees that the researcher is utilizing questions that measure the issues of significance (Whittemore, Chase, & Mandle, 2001). The aim of this validity is to understand the reasons and process of survey questions (Winter, 2000). With the help of research sub-questions, hypotheses and TAM model, all survey questions are developed.

### 3.13 Data Gathering

The data gathered through a statistically significant online survey. Social media websites used for sending the link to participants for this online survey. The link was created after ethics approval from the ethics committee of Wintec. The link was available for four weeks for the participant. The participants were able to access the link during this period and answered the survey questions.

### 3.13.1 Survey Responses

The survey started to date, response rate, participants' drop quit question, gender and age groups are shown in the following subsection.

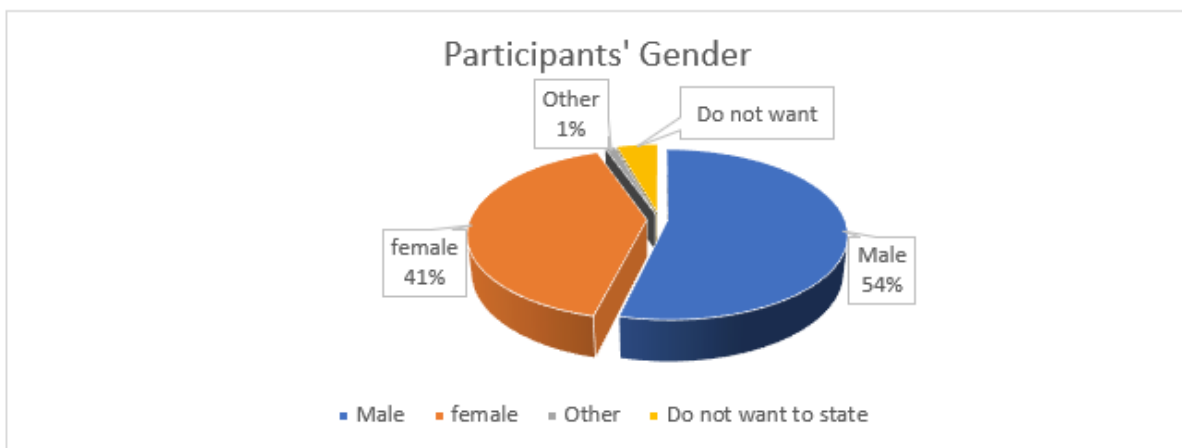
#### 3.13.1.1 Demographic Result

Table 4 and 5 present the demographic data recorded during the survey. In the survey, there were four types of contestant took part: Male, Female, Others, and Do not Want to State. The 4<sup>th</sup> option was provided for those people who want to hide their identity and gender. For the convenience of those people, option 4 was provided.

S.no	Gender	Responses	Percentage
1.	Male	49	53.85%
2.	Female	37	40.66%
3.	Other	1	1.10%
4.	Do not want to state	4	4.40%
5.	Total participants	94	100.00%

**Table 4: Gender of Participants**

In this survey, 53%, 40% female, 1% other and 4% do not want to state participants took part. All the result of this research is based on these partakers. Table 4 is based on survey question 2, that analyses the 94 participants' data based on their gender.



**Figure 8. Participants' Gender**

Figure 8 represents all contestants gender in different colours. The vast blue part of the pie chart represents the male participant and orange part females.

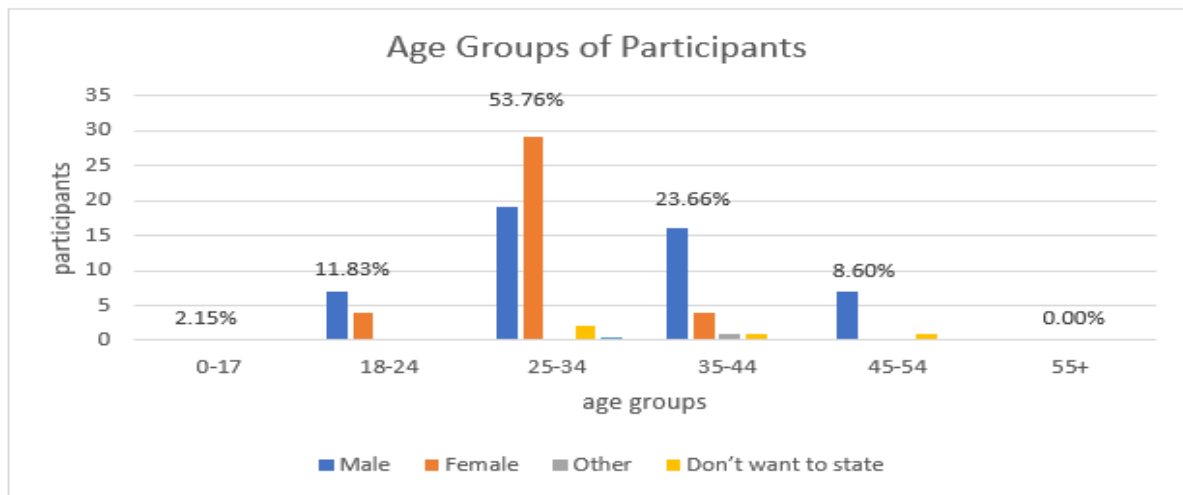
### 3.13.2 Age Groups of Participants

All participants are classified by their age groups in Table 13. Six age groups options were given to the participants. People had to select one of them. Therefore, this was a single choice question. The first group was 0-17 and did not allow to participate in the survey. Table 5 is based on survey question 1 to examine the age of participants.

**Table 5: Age Groups of Participants**

S.no	Age group	Male		Female		Other		Do not want to state		Total	%
		Parti.	100%	Parti.	100%	Parti.	100%	Parti.	100%		
1.	0-17	-	-	-	-	-	-	-	-	2	2.15%
2.	18-24	7	14.29%	4	10.81%	0	0.00%	0.00%	0.00%	11	11.83%
3.	25-34	19	38.78%	29	78.38%	0	0.00%	2	50.00%	50	53.76%
4.	35-44	16	32.65%	4	10.81%	1	100%	1	100%	22	23.66%
5.	45-54	7	14.29%	0	0.00%	0	0.00%	1	100%	8	8.60%
6.	55+	0	0.00%	0	0.00%	0	0.00%	0.00%	0.00%	0	0.00%
7.	Overall	49	53.85%	37	40.66%	1	1.10%	4	4.40%	94	100%

53% of participants from the 25-34 age group in the survey that is more than other age groups. However, females are less than male participants but 78% of females from this age group. In Table 5, the first column represents the six different age groups. The 2<sup>nd</sup> column that is divided between two sub-columns appears for all male participants age group and proportion. Similarly, the 3<sup>rd</sup> column expresses the female participants. After this, 4<sup>th</sup> and 5<sup>th</sup> column represent other gender and do not want to state people. The last two columns divided all participants with their age groups and described the overall proposition. The last row of Table 5 shows aggregate data and percentage by the participants' gender.



**Figure 9: Participants' Age Groups**

The bar graph explains most of the participants from the 25-34 age group. The vertical axis of the chart shows the number of participants. The horizontal axis illustrates the age groups. The red bar represents female and blue bar male participants. The given percentage is the total proportion of both genders.



## 4 Analysis

The analysis intends to investigate and report discoveries on the examination per the chose strategy for gathered data. The analysis is orchestrated and assembled in a significant way. For this quantitative research, the method is used for analysing the data. The gathered data from an online survey is analysed for descriptive statistical, that depends upon survey responses. Table 6 denotes the tests to be performed on the responses received for each of the survey questions. Table 6 shows the links between survey question, survey topic and hypothesis with measurement types and test.

### 4.1 Frequency of Air travelling by All Participants

This subsection is based on survey question 3. The regularity flew of the participants is examined. How often participants visit through commercial airline on average. The aim of this section is examined the people who visit more than once in their life, have more experience and complaints with the airline companies. Tables 6, 7, 8 and figures 10, 11 represent the data of survey question 3.

In Table 6 the first row represents the serial number and second, how often participants made a trip through the airline. The next five-column are separated into two sub-columns. For example, the column of males is divided into participant and percentage columns. The subsections show the number of participants and percentage. The last column (result) depicts the total amount of participants and their percentage based on the overall outcome of frequency. For instance, 13% of participants visit more than twice a year, that is the percentage of the global spectrum of all genders. This means only 13% of people, did air travel more than twice a year. The last 10<sup>th</sup> row of table 15 shows the data of each gender and percentage.

**Table 6: Frequency of Air trip by Gender**

S.no	Frequency	Male		Female		Other		Do not want to state		Results	
		Participant	100%	Participant	100%	Participant	100%	Participant	100%	Participant	100%
1.	More than twice a month	1	2.04%	0	00%	0	0%	0	0%	1	1.10%
2.	Once per month	1	2.04%	1	2.04%	0	0%	0	0%	2	2.20%
3.	More than twice a year	8	16.33%	4	10.81%	0	0%	0	0%	12	13.19%
4.	Twice a year	9	18.37%	6	16.22%	0	0%	0	0%	15	16.48%
5.	Once per year	13	26.53%	11	29.73%	0	00%	1	25%	25	27.47%
6.	Once in three to five years	8	16.33%	12	32.43%	1	100%	3	75.00%	24	26.37%
7.	Once in five to ten years	4	8.16%	2	5.41%	0	0%	0	0%	6	6.59%
8.	Once in a lifetime	3	6.12%	1	2.70%	0	0%	0	0%	4	4.40%
9.	Never	2	4.08%	0	0%	0	0%	0	0%	2	2.20%
10.	Overall	49	53.85%	37	40.66%	1	1.10%	4	4.40%	91	100%

The data from Table 6 shows that 26% male and 29% female participants make a journey through commercial airlines once per year. Overall, 27% of people make air journey once per year. 26% of people make an air trip after three to five years, 16% are male and 32% female from them. Despite it, 2% of male participants never did air travel in their life till date. The surprising data is that feminine do air journey more than male.

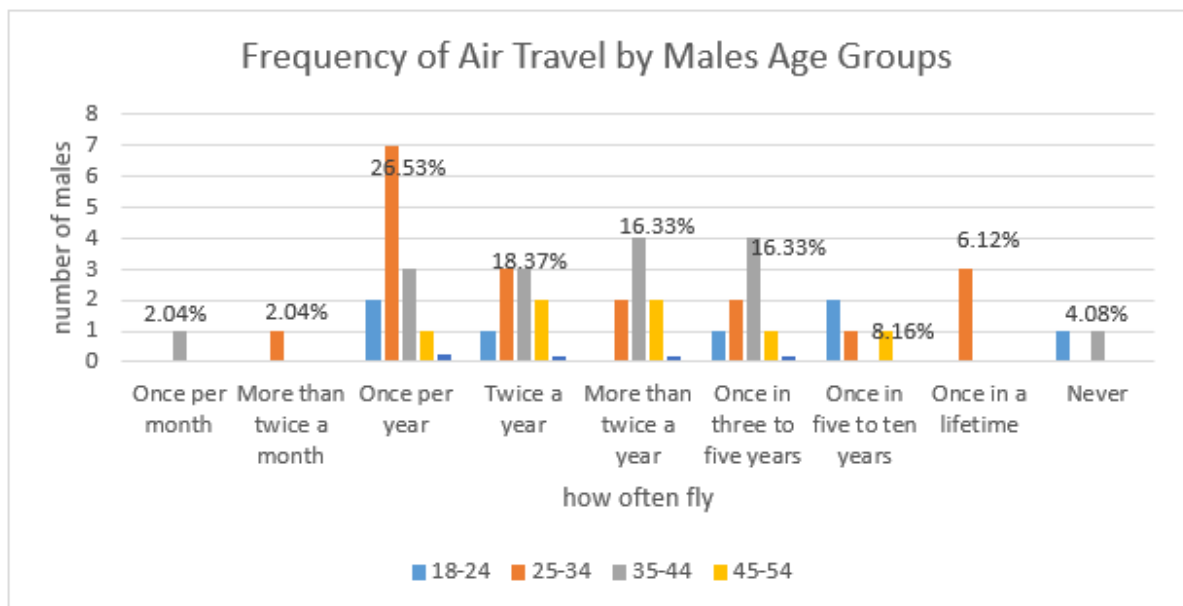
#### **4.1.1 Frequency of Air Travelling, Male Participants**

In this section, the frequency of male participants is surveyed by their age difference. The first row shows the age group and percentage. The last column illustrates the overall percentage by frequency. The last row of Table 7 depicts the overall data by age group and percentage. For example, 32% of male participants made air trip in the age between 35 and 44.

**Table 7: Frequency of Air Travelling by Males Age Groups**

Frequency	18-24	1001%	25-34	00%	35-44	100%	45-54	100%	Total	Percentage
More than twice a month	1	50%	0	0%	0	0%	1	50%	2	2.04%
Once per month	0	0%	0	0%	1	100%	0	0%	1	2.04%
More than twice a year	0	0%	2	25%	4	50%	2	25%	8	16.33%
Twice a year	1	11.115	3	33.33%	3	33.33%	2	22.22%	9	18.37%
<b>Once per year</b>	<b>2</b>	<b>15.38%</b>	<b>7</b>	<b>53.85%</b>	<b>3</b>	<b>23%</b>	<b>1</b>	<b>7.69%</b>	<b>13</b>	<b>26.53%</b>
Once in three to five years	1	12.50%	2	25%	4	50%	1	12.50%	8	16.33%
Once in five to ten years	2	50%	1	25%	0	0%	1	25%	4	8.16%
Once in a lifetime	0	0%	3	100%	0	0%	0	0%	3	6.12%
Never	1	50%	0	0%	1	50%	0	0%	2	4.08%
Total	7	14.29%	19	38.78%	16	32.65%	7	14.29%	49	100%

38% of male participants did air travel between the age of 25 and 34. Most of the male participants did air travel once per year, and 53% of them belong to the 25-35 age group. 50% of male contestants did air travel once in five to ten years and had an age between 18 and 24.

**Figure 10. Frequency of Air Travelling by Males Age Groups**

This bar graph is about how often male participants make air trip by their age group. The vertical axis shows the number of male participants. The horizontal axis shows how often male participants do air travel on average by their age group. The blue bar for the 18-24 age group, red 25-34, green 35-44 and purple 45-54. The red bar is high more than other bars, and it shows male from the 25-34 age group did air travel once per year. Overall, 26% male from all age group visits once per year by aeroplane.

32% of female participants do air travel once in three to five years. 91% of them have the age between 25 and 34. 78% of female from this age group do air travel more than another age group the same as male participants.

#### **4.2 Selection of Airline**

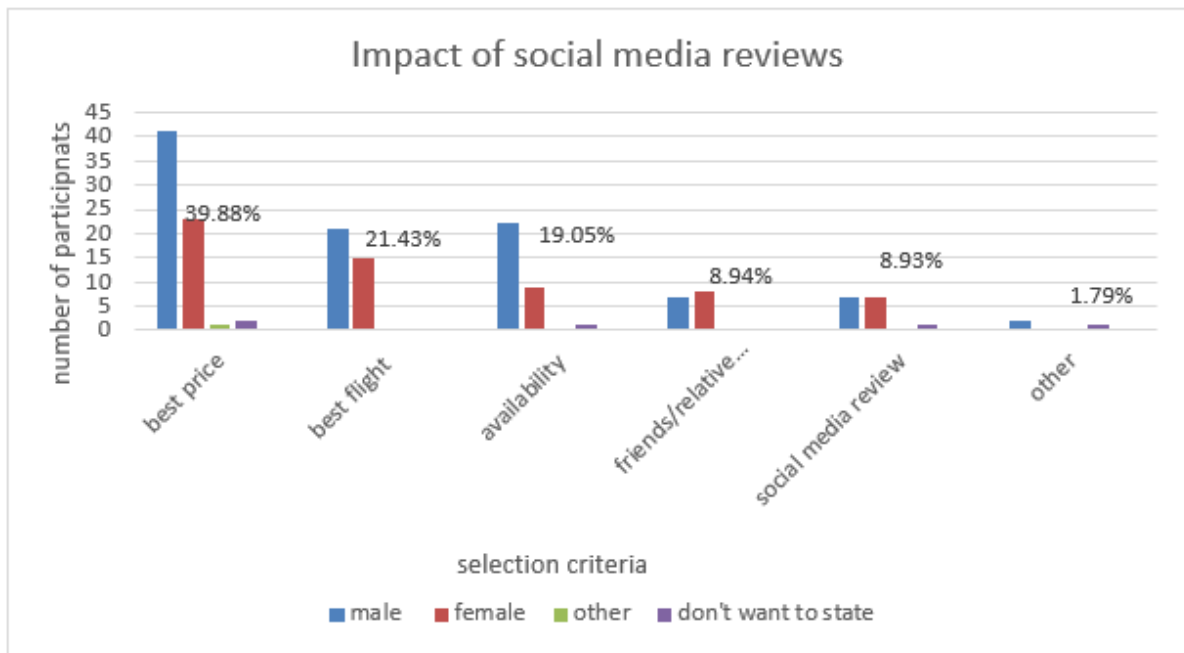
Based on survey question 4, this sub subsection is organised. The criteria for selecting airlines are examined. They show how people select any airline for air travel. Before air travel, what things determined by the customers and which things affect them. There were five options given to the participants, that was a multiple-choice question. Participants could have chosen more than one option. The primary purpose of survey question 4 to observe that is social media or review impact the customers for selection in the airline. Table 8 and figure 11 represent the survey question 4 data.

The first row represents the serial number, the second base of the selection of airline, third for male participants responses and percentages, the fourth female's responses and percentage, fifth for others, sixth do not want to state and last overall responses and percentages.

**Table 8: Effect of social media review**

S/N	Criteria of selection	Male		Female		other		Do not want to state		total	Percentage
		Response	100%	Response	100%	Response	100%	Response	100%	Response	100%
1.	Best price	41	41.00%	23	37.10%	1	100%	2	40%	67	39.88%
2.	Best flight	21	21.00%	15	24.19%	0	0	0	0	36	21.43%
3.	Friends/relative recommendations	7	7.00%	8	12.90%	0	0	0	0	15	8.93%
4.	Social media review	7	7.00%	7	11.29%	0	0	1	20%	15	8.93%
5.	Availability	22	22.00%	9	14.52%	0	0	1	20%	32	19.05%
6.	Other 1.Route option 2.Least travel time	2	2.00%	0	0	0	0	1	20%	3	1.79%
	Overall	100	59.52%	62	36.90%	1	0.60%	5	2.98%	168	100%

Despite having 91 participants, 168 responses were received due to the multiple-choice question. 100 responses from male participants and 62 responses from females. Before the selection of any airline people consider lots of things. 39% of people check price and best deal before travelling. This means, most of participants considered for the best deal and best price. Word of mouth and good or bad reviews did not matter for them. Despite it, 8% of people selected a flight after getting the recommendation from their friends or relatives. Similarly, 8% of people check social media review before booking their air ticket, 7% male and 11% female do this.



**Figure 11. Impact of social media's reviews on customers**

Figure 11 shows how words of mouth affect a passenger before choosing an airline for an air trip. The vertical axis of the chart shows a number of participants. The horizontal axis of the graph represents the selection criteria. Blue bars represent the male participants and red bars female participant percentage. Overall, 16% of people depend on word of mouth, according to figure 11.

#### **4.2.1 Name of Popular Airline Companies among Participants**

All airline companies listed in Table 19, that were used by participants. Based on survey question 6a tables 19, 20 and figures 18, 19 are created. The first column of Table 19 displays name of airline companies. The next column shows the number of participants never face any problem during air trip. The column after that represents how many participants face difficulty with the airline. The “total responses” and “percentage” column shows the total responses for each airline with percentage. There are 27 different airline companies mentioned by participants.

12% of participants travelled by Air New Zealand (NZ) airline, 24% with Singapore Airline, 10% with Air China and 12% with Thai Airline. 99 (100%) responses recorded for survey question 6a and 7.1, 66% of participants never faced any problem, but 33% had a problem or faced difficulty before, during or after travelling. The aim of showing Table 19 is how many different airlines are recorded during the survey.

Figure 12 shows the name of the airline used for travelling by participants. The blue bar represents the participants who never faced any problem in the airline. On the other hand, the red bar represents those flayers who had a problem before during or after travel in the airline.

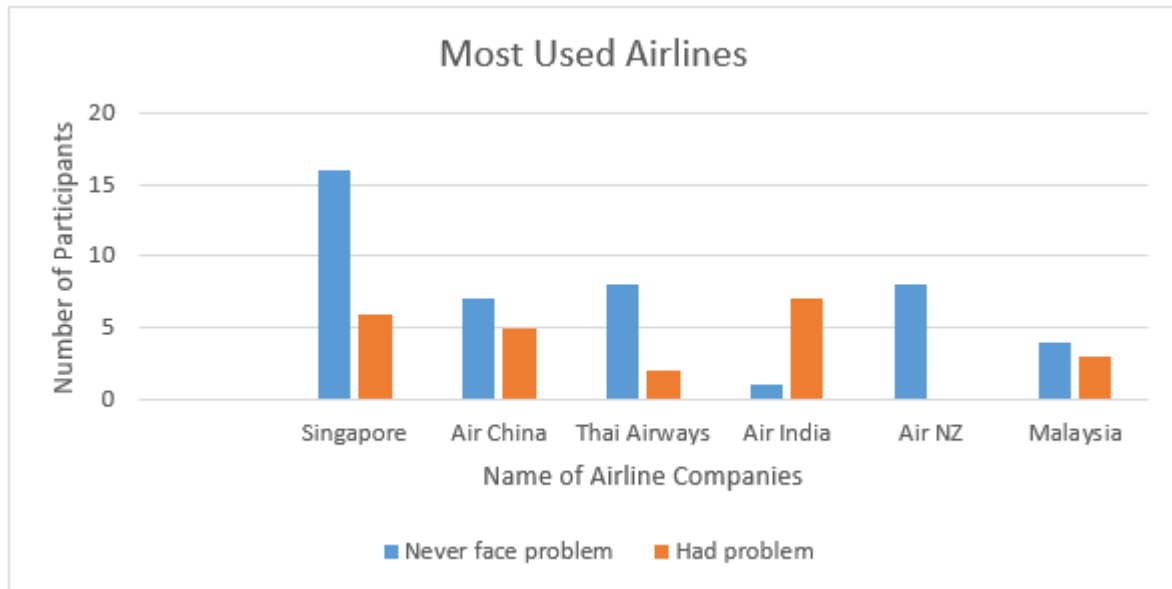
6 most used airlines listed in table 20, because the majority of the participants used these airlines for travelling. The first column outlined the name of airline companies. The second column represents the respondents who never face any problem in the airline. The next column shows those who faced some difficulties in the airline.

**Table 9: Most Used Airlines Companies by Participants**

Airline Companies	Never face problem		Had problem		Overall	
	Total participants	%	Total participants	%	Total responses	%
Singapore	16	72.73%	6	27.27%	22	32.84%
Air China	7	58.33%	5	41.67%	12	17.91%
Thai Airways	8	80.00%	2	20.00%	10	14.93%
Air India	1	12.50%	7	87.50%	8	11.94%
Air NZ	8	100.00%	0	0.00%	8	11.94%
Malaysia	4	57.14%	3	42.86%	7	10.45%
Total	44	32.84%	23	17.16%	67	50.00%

Table 9 shows the most recorded airlines from the participants. These airlines listed in table 9 because most of the participants were mentioned these airline companies due to satisfaction and dissatisfaction level. 32% of responses were recorded for Singapore Airline. 72% of participants were satisfied and 27% dissatisfied with Singapore Airline services. 17% of responses were recorded for Air China Airline. 58% of participants never faced any problem, but 41% faced problem during air trip with China Airline. 14% of participants did air travel with Thai Airways. 80% of participants never faced any problem, and 20% filed complaints against Thai Airways. 11% of participants did travel by Air India Airline. 12% never faced any problem, but 87% of participants lodged complaints against Air India Airline. 11% of participants used Air New Zealand for air trip. 100% of participants confessed that they never faced any problem with the airline. 10% of participants used Malaysia Airline for air trip.

57% of participants declared that they never faced any problem or issues during their air trip with Malaysia airline, but 42% filed complaints against the airline company.



**Figure 12. Most Used Airlines by Participants**

Most satisfied customers came from Singapore airline and Air New Zealand. On the other hand, most of the complaints recorded by Air India Airlines' customers.

#### 4.3 Share Experience on Social Media

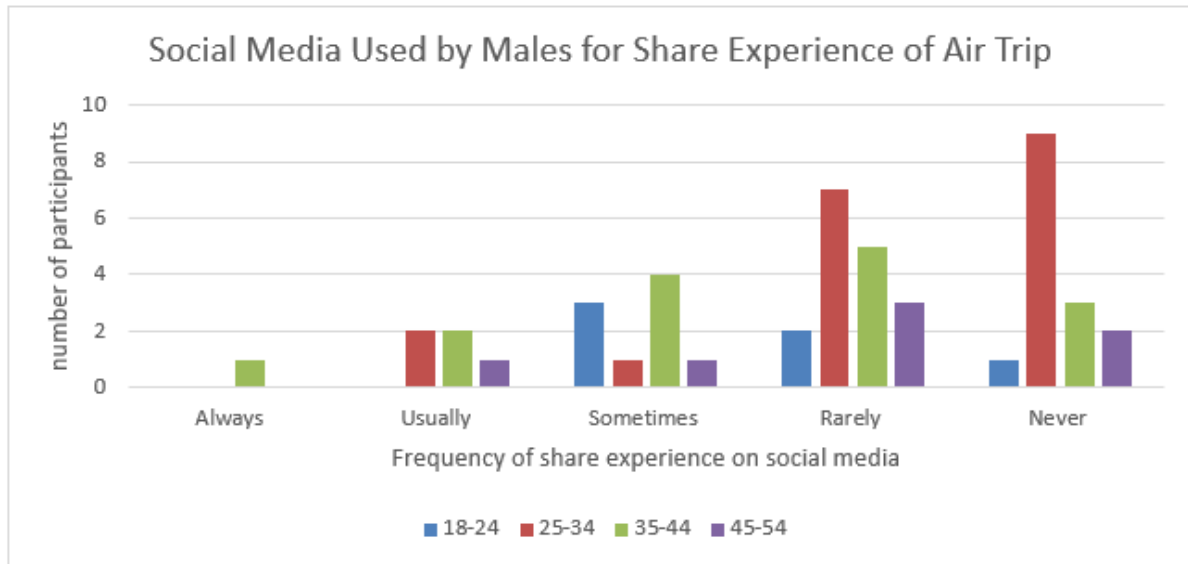
This subsection is based on survey question 5. The aim of the survey question 5 was to identify how many people share positive or negative experience on social media after air travel, that creates word of mouth. Five options were given to the participants. Tables 21, 22, and figures 20,21 represent the data of survey question 5. Table 21 represent how many males and their age groups used social media to share their experience.

**Table 10: Social media Used by Males for Share Experiences of Air Travels**

Male	18-24	%	25-34	%	35-44	%	45-54	%	Total	Percentage
Always	0	0%	0	0%	1	6.67%	0	0%	1	2.13%
Usually	0	0%	2	10.53%	2	13.33%	1	14.29%	5	10.64%
Sometimes	3	50%	1	5.26%	4	26.67%	1	14.29%	9	19.15%
Rarely	2	33.33%	7	36.84%	5	33.33%	3	42.86%	17	36.17%
Never	1	16.67%	9	47.37%	3	20%	2	28.57%	15	31.91%
Total	6	12.77%	19	40.43%	15	31.91%	7	14.89%	47	100.00%



The first column of Table 10 represents how often candidates use social media after air travel for leave comments and share experience with other people. The next four columns depict the responses of male participants by their age groups. The last two columns reveal the overall data of male participants by each option. The last row of Table 10 shows the whole data and percentage by age group.



**Figure 13. Use of Social Media by Males for Share Experience of Air Travel**

The bar graph shows the male participants data of share experience on social media after air travel. The vertical axis of the chart represents the number of male participants and the horizontal frequency of share happening after air travel on social media. The different colours represent the different age groups like blue bars 18-24 age group, red 25-34, green 35-44 and purple 45-54. 47% male from 25 to 34 age group never share their experience on social media.

#### 4.3.1 Social Media Used by Females to Share Experience of Air Travel

In Table 22, the frequency of female participants to share experience on social media by their age group is examined. Table 22 shows different options given to the participants about how often they share the experience of air travel with others through social media. The data is sorted by participants age group.

**Table 11: Use of Social Media by Females to Share Experience of Air trip**

Female	18-24	%	25-34	%	35-44	%	45-54	Total	Percentage
Always	0	0%	2	6.90%	0	0%	0	2	5.41%
Usually	1	25.00%	0	0%	1	25.00%	0	2	5.41%
<b>Sometimes</b>	<b>1</b>	<b>25.00%</b>	<b>13</b>	<b>44.83%</b>	<b>2</b>	<b>50.00%</b>	<b>0</b>	<b>16</b>	<b>43.24%</b>
Rarely	1	25.00%	8	27.59%	0	0%	0	9	24.32%
Never	1	25.00%	6	20.69%	1	25.00%	0	8	21.62%
Total	4	10.81%	29	78.38%	4	10.81%	0	37	100.00%

43 % female share experience “sometimes” on social media with others after their air travel.

Females from the 25-34 age group share the experience more than other age groups.

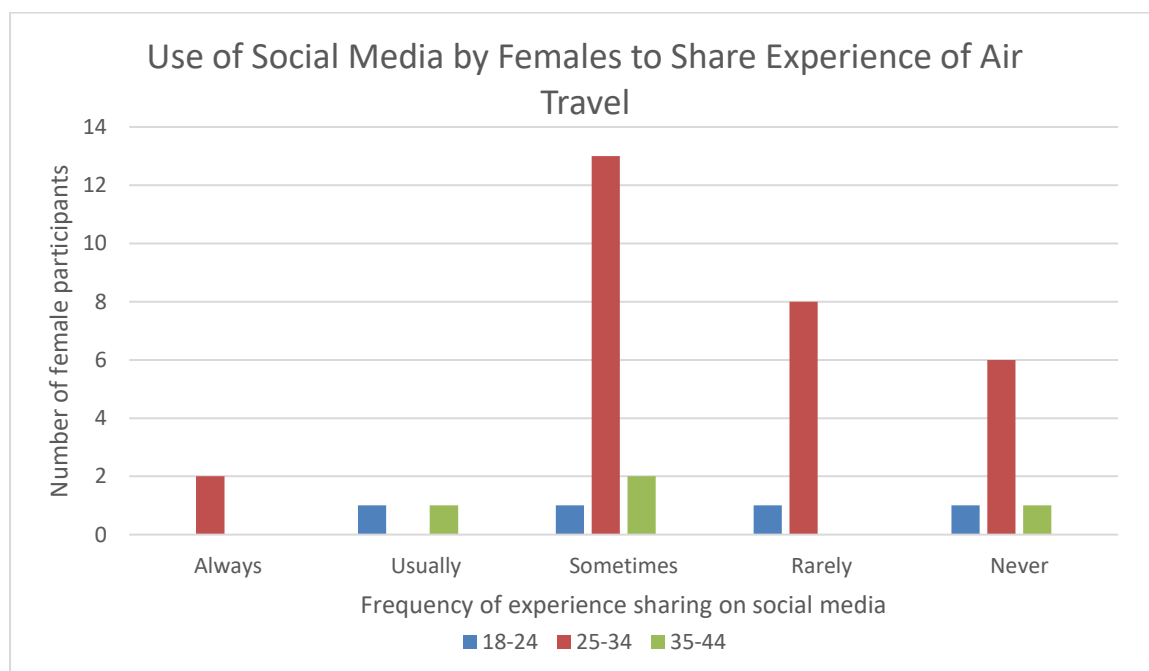
**Figure 14. Use of Social Media by Females for Share Experience of Air Trip**

Figure 14 illustrates the frequency of female participants sharing their experience on social media. The vertical axis of the chart shows the number of participants and the horizontal frequency of sharing. The different colours of the bars represent the different age groups. The blue colour represents the age group 18-24, red 25-34 and green 35-44. The majority of the female participants share experience on social media regarding air trip and airline services.

#### 4.4 Problem Faced by Participants

This subsection is based on survey question 6. The aim of the survey question number 6 was identifying how many males and females face problems before, during and after the flight by their age groups. The data is presented in tables 23, 24,26 and figure 22.

Table 12 represents data of males and females' participants faced problems or filed complaints against any airline company. The first row represents the genders and overall responses. The 2<sup>nd</sup> and 3<sup>rd</sup> rows of the table divided into two separated columns. The first column shows the responses and the second percentage. The third row shows data of those participants who faced any problem or filed a complaint against any airline. The next row represents the data of those participants who never face any problem before, during and after air travel.

**Table 12: Problems Faced by All Participants**

Faced problem or not	Male		Female		Overall	
	Responses	%	Responses	%	Total	%
Suffered during Air trip	18	38.30%	10	27.03%	28	33.33%
Never faced any Problem during Air Trip	29	61.70%	27	72.97%	56	66.67%
Total	47	55.95%	37	44.05%	84	100%

According to the recorded data, 33% of participants faced problems due to the airline company, and 66% never faced any problem. 38% of males and 27% of females faced difficulty in their air trip. On the other hand, 61% of males and 72% of females claimed that they never faced any problem while air travelling.

**Table 13: Problem Faced by Male Participants**

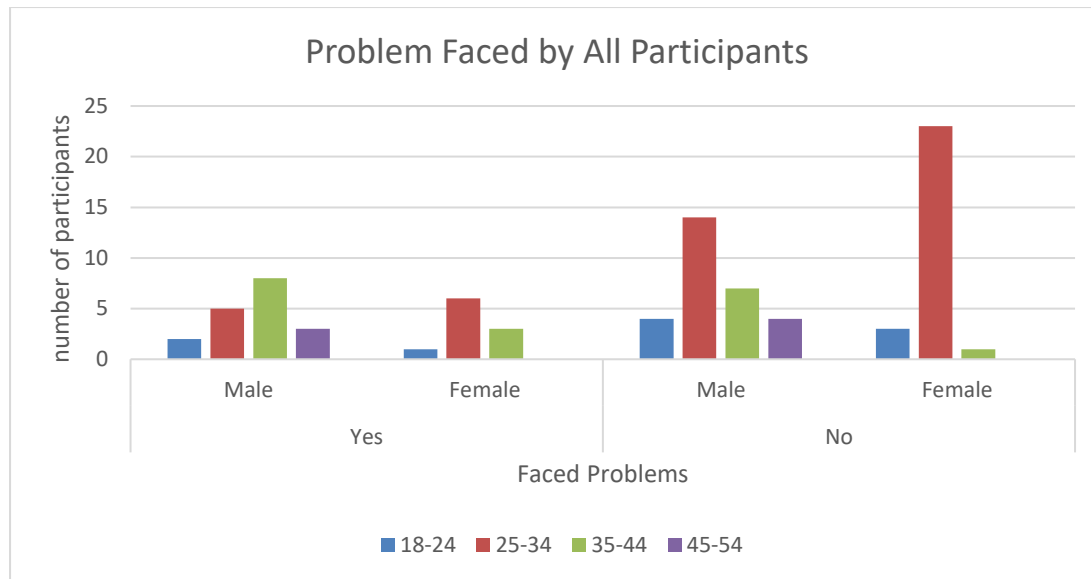
Male	18-24	%	25-34	%	35-44	%	45-54	%	Total	%
Suffered During Air Trip	2	33.33%	5	26.32%	8	53.33%	3	42.86%	18	38.30%
Never Faced Problem during Air Trip	4	66.67%	14	73.68%	7	46.67%	4	57.14%	29	61.70%
Total	6	112.77%	19	40.43%	15	31.91%	7	14.89%	37	100%

53% male participants from 35 to 44 age groups filed complaints against the airline companies. On the other hand, 73% of the male participants from 25 to 34 age groups never face any problem during air travel.

**Table 14: Problem Faced by Female Participants**

Female	18-24	%	25-34	%	35-44	%	Total	%
Suffered during Air trip	1	25%	6	20.69%	3	75%	10	27.03%
Never Faced any Problem During Air Trip	3	75%	23	79.31%	1	25%	27	72.97%
Total	4	10.81%	29	78.38%	4	10.81%	37	100%

Table 14 represents the responses recorded by female participants. 72% of female never face any problem during their air trip. 20% of female had the age between 25 and 34 issues faced while air travelling.



**Figure 15: Problem Faced by Participants**

The bar graph represents the overall data problem faced by people according to their age groups. The vertical axis of the chart shows the number of participants. The horizontal axis represents the genders divided by age groups. The graph is divided into two different parts. The “yes” unit shows the genders, divided their age group who faced problem during their air trip. The “no” section of the graph shows males and females participants that divided into their age groups, never faced any problem. The bottom axis of the graph represents the different age groups in different colours.

#### 4.5 Use of Different Travel Classes by Participants

This subsection is based on survey question number 7.2. The recorded data from the survey question 7.2 is presented in tables 26, 27 and figures 23, 24. In this subsection, the travel classes were used by participants. With the help of this question, the common complaint area would be clear.

##### 4.5.1 Travel Classes Used by Males and Females Participants

In this section, travel class used by customers are identified. The data defined in Table 26 is based on the survey question 7.2, and the aim of the question to examined which travel class is common for facing problems and filed complaints. The first column of Table 26 depicts the travel class. The next three columns represent how many participants used travel class by their gender and percentage. The last column represents the overall responses and percentage by travel classes.

**Table 15: Travel Classes Used by Participants**

Travel class	Male		Female		Do not want to state	Overall	
	Responses	%	Responses	%		Total	%
First-class	0	0%	1	10.00%	0	1	3.33%
Business class	1	5.56%	0	0%	0	1	3.33%
Premium economy	2	11.11%	2	20.00%	0	4	13.33%
<b>Economy class</b>	<b>15</b>	<b>83.33%</b>	<b>7</b>	<b>70.00%</b>	<b>2</b>	<b>24</b>	<b>80.00%</b>
Total	18	60%	10	33.33%	2 (6.67%)	30	100%

80% of participants used the economy class for air travel. This means most of the complaints come from economy class. 83% male and 70% of females did air travel in economy class.

**Figure 16: Different Travel Classes Used by Participants**

Figure 16 shows how many males and females use different travel class during their air trip. The vertical axis of the graph represents the number of participants who use different travel classes. The horizontal axis of Figure 16 shows the various types used by each gender. The different colours of bars represent different genders. The blue colour represents the male, red females and green do not want to state their gender.

**Table 16: Travel Classes Used by Participants' Different age groups and Gender**

Travel class	Male					Do not want to state	Female				Overall	
	18-24	25-34	35-44	45-54	Total	0	18-24	25-34	35-44	total	Total	%
First-class	0	0	0	0	0	0	1	0	0	1 (10%)	1	3.33%
Business-class	0	0	1 (12.50%)	0	1 (5.56%)	0	0	0	0	0	1	3.33%
Premium economy	0	2 (28.57%)	0	0	2 (11.11%)	0	0	2 (33.33%)	0	2 (20%)	4	13.33%
Economy class	0	5 (71.43%)	7 (87.50%)	3 (100%)	15 (83.33%)	2 100%	0	4 (66.67%)	3	7 (70%)	24	80.00%
Total	0	7 (38.89%)	8 (44.44%)	3 (16.67%)	18 (60%)	2 (6.67%)	1 (10%)	6 (60%)	3 (30%)	10 (33.33%)	30	100%

Table 16 shows the use of different travel classes by gender divided into their age groups. The first column shows the various travel classes. The second column is separated into different age groups of male participants. The third column represents those people who do not want to state their gender. The next column represents the female participants according to their age groups. The last column shows overall responses and percentage from all genders according to travel classes. The last row represents the global responses of each gender by their age groups. It is clear from the recorded data that 80% of people use economy travel class for air travelling. 83% male and 70% of female travel through this class. 87% of males 35 to 44 age grouped and females 25 to 34 used economy travel class.

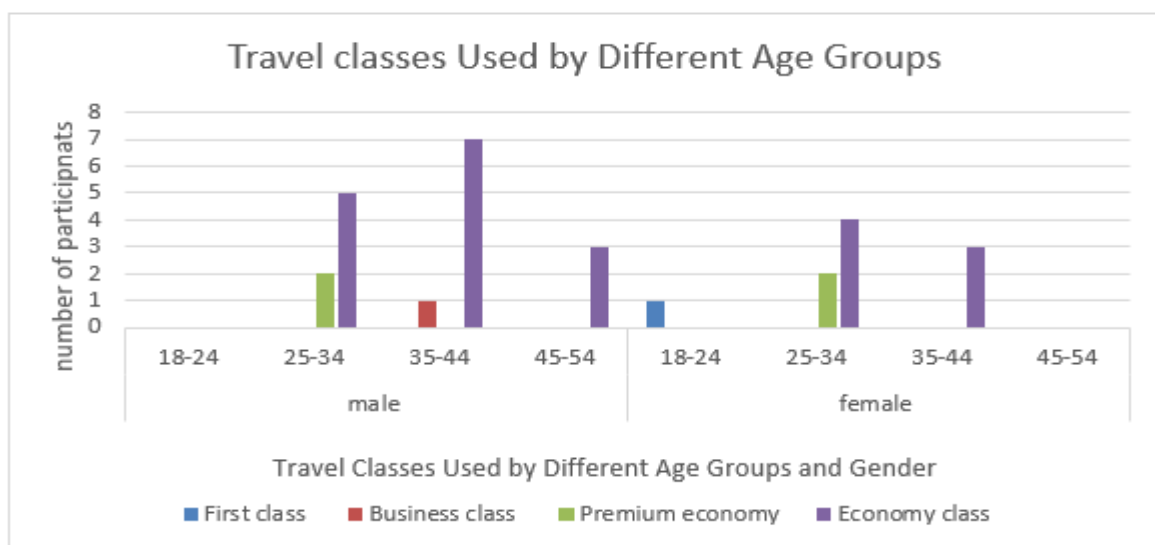
**Figure 17: Different Travel Classes used by Gender and Age groups**

Figure 17 represents the use of different travel classes by different age group and genders. The vertical axis of the graph shows the number of participants and horizontal different age groups of male and female participants. The different colours of the chart represent different travel classes like blue bar colour shows the first class, red business class, green premium economy and purple economy class. The rest of the graph shows the male participants by their age groups and right-side females. It is clear from the graph that male participants use economy class more than the other travel classes at each age group. Premium economy is used equally by both genders and age group. Female from 25 to 44 prefer economy class.

#### 4.6 Complaint Methods

This subsection is based on survey question 7.4. complaint method used for complaints is verified through survey question 7.4. There were five different methods in the options. Overall, 30 responses were collected from this question because it was a multiple-choice question. Table 31, 32, 33 and figures 27, 28 represent the collected data for survey question 7.4. The aim of this question was to identify “how many people are using social media as a compliant tool” and how much it is helpful for people to approach the airline companies. If people are not using social media, then which method was used.

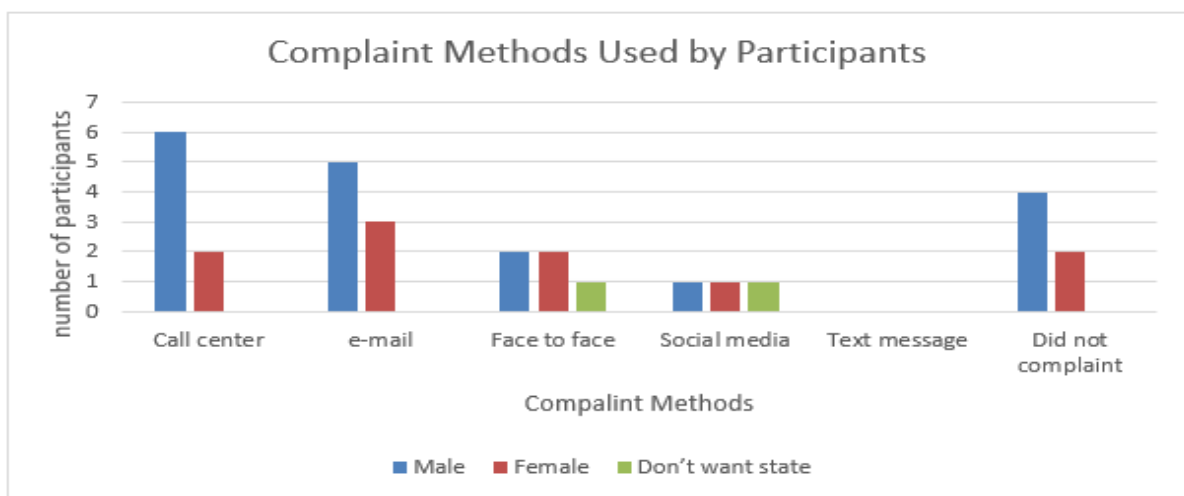
Table 17 represents males and females participants’ used complaint methods. Sometimes people use more than one complaint methods. Therefore, the survey question 7.4 has multiple choice answers. Participants selected the options that they used for making complaints. Table 17 shows the responses collected from males and females’ participants about complaint methods. The first column of Table 17 represents the methods of the complaint. The second column is divided into two columns which represent the responses from male participants and percentage. Similarly, the next column represents female participants. The last column is about overall answers and proportion according to complaint methods.

**Table 17: Complaint Methods Used by Participants**



Complaint methods	Male		Female		Do not want to state	Overall responses	
	Responses	%	Responses	%		total	%
Call centre	6	33.33%	2	20.00%	0	8	26.67%
Face to face	2	11.11%	2	20.00%	1	5	16.67%
e-mail	5	27.78%	3	30.00%	0	8	26.67%
<b>Social media</b>	<b>1</b>	<b>5.56%</b>	<b>1</b>	<b>10.00%</b>	<b>1</b>	<b>3</b>	<b>10.00%</b>
Text message	0	0	0	0	0	0	0.00%
Did not complaint	4	22.22%	2	20.00%	0	6	20.00%
<b>Total</b>	<b>18</b>	<b>60%</b>	<b>10</b>	<b>33.33%</b>	<b>2(6.67%)</b>	<b>30</b>	<b>100%</b>

According to table 31, 33% male gave priority to call centre as complaint method. 27% male choose e-mail as complaint method. Only 5% of male used social media for file complaints. The surprising data are that 22% male and 20% never complaints about their faced problem with airline companies. Female preferred e-mail rather than other complaint methods. 30% of female made complaints through call- centre and 30% face to face. To the sum up, only 10% of people use social media for the complaint to an airline company, and 20% of people never file their complaints.



**Figure 18: Complaint Methods used by Males and Females**

Figure 18 helps to understand all data in a graph form. The vertical axis of the graph represents the number of participants and horizontal axis different complaint methods used by males and females. The different colours represent different demographic. The blue colour represents male participants and red bar females.

Table 18 represents the male participants' data for complaint methods. Which age group preferred social media as a complaint tool is examined in Table 18.

**Table 18: Complaint Methods used by Male Participants**

Male	18-24	%	25-34	%	35-44	%	45-54	%	Total	
Call centre			2	40%	4	50%			6	33.33%
Face to face	1	50%					1	33.33%	2	11.11%
e-mail			2	40%	2	25%	1	33.33%	5	27.78%
<b>Social media</b>					<b>1</b>	<b>12.50%</b>			<b>1</b>	<b>5.56%</b>
Text message	0		0		0		0		0	
Did not complaint	1	50%	1	20%	1	12.50%	1	33.33%	4	22.22%
Total	2	11.11%	5	27.78%	8	44.44%	3	16.67%	18	100%

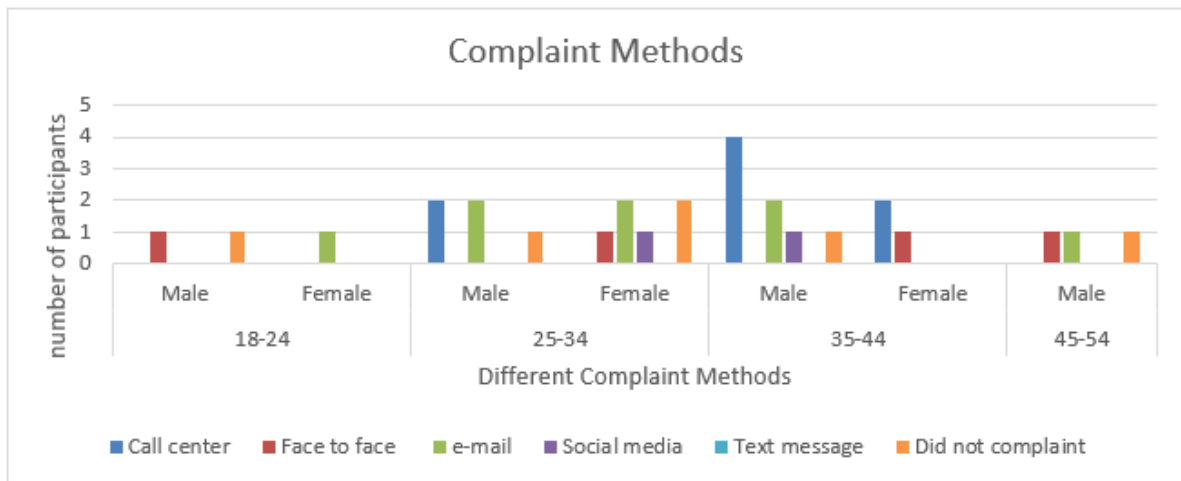
Only 5% male used social media as a compliant tool and participants had the age between 35 and 44. The surprising data are that other age group never use social media as a complaint tool. 22% of male participants never lodged any complaint against any airline company.

The 33 represent the responses from female participants for survey question 7.4. The collected data is classified by female age groups.

**Table 19: Complaint Methods used by female Participants**

Female	18-24	%	25-34	%	35-44	%	Total	%
Call centre					2	66.67%	2	20%
Face to face			1	16.67%	1	33.33%	2	20%
e-mail	1	100%	2	33.33%			3	30%
<b>Social media</b>			<b>1</b>	<b>16.67%</b>			<b>1</b>	<b>10%</b>
Text message								
Did not complaint			2	33.33%			2	20%
Total	1	10%	6	60%	3	30%	10	100%

10% of female used social media as a compliant tool and had the age between 25 and 34. The surprising thing was that, female preferred e-mails as complaint tool rather than other methods.



**Figure 19: Different Complaint Methods Used by Different Age Groups and Genders**

Figure 19 represents the data, which age group used complaint method more than others. The vertical axis of the graph represents the number of participants. The horizontal axis shows the different age group of each gender and way of file complaints. The different colours represent the various techniques of file a complaint. The blue bar is highlighted more than other colours that describe the use of call centres as a complaint tool.

#### 4.7 Social Media Sites using for Complaints

In this subsection, the social media site is examined, which is used by participants to file their complaints. This subsection is based on survey question 7.4a. Tables 34 represents the data of survey question 7.4a. 33% male and 33% female used Facebook to file a complaint to the airline company. The person who doesn't want to state gender had used all given social media websites to file a complaint against an airline company. Table 34 represents the data according to participants gender and age group.

**Table 20: Social Media Websites used for Complaints**

Social media web sites	Male		Female		Do not want to state %		Overall responses	
	35-44 age group	%	25-34 age group	%	Responses	%	Total	%
Facebook	1	33.33%	1	33.33%	1	33.33%	3	50%
Twitter					1	25%	1	16.67%
YouTube					1	25%	1	16.67%
Google+					1	25%	1	16.67%
Total	1	16.67%	1	16.67%	4	66.67%	6	100%

Which social media site is used for complaints by participants is examined in Table 20. The first column represents the different ways of complaints, and the next column represents the male participants' responses, that is divided into two sub-columns. In the first sub-column, only 35 to 44 age group male participants are examined because only one male made complaint thorough social media. Similarly, the next column represents female participants data. The last column represents the overall responses and percentage.

The participants used social media for complaints, how often participants used social media for complaints is identified in Table 35 and based on survey question 7.4b and the aim of the survey question to find out how frequently social media used for complaints.

**Table 21: How Frequently Participants use Social Media for Complaints**

Frequency of use	Male		Female		Do not want to state		Total	
	35-44 age group	%	25-34 age group	%	responses	%	Total	%
Once	1	50%	1	50%	0		2	75%
Twice	0		0		1	100%	1	25%
Total	1	33.33%	1	33.33%	1	33.33%	3	100%

Table 21 shows 50% of males and 50% of females used social media once in their life to file their complaints to airline companies. Overall, 75% used social media once and 25% twice for file complaints against an airline. Why these people used social media as a complaint tool is examined in Table 36. The table is based on the survey question 7.4c and the aim of the question to identify why people choose social media rather than other complaint methods.

**Table 22: Reason to Choose Social Media as Complaint Tool**

Reason to choose	Male		Female		Do not want to state		Overall	
	35-40 age group	%	25-34 age group	%	Responses	%	Total	
Awareness			1	50%	1	50%	2	75%
Know Only way to complaint	1	100%					1	25%
Total	1	33.33%	1	33.33%	1	33.33%	3	100%

In Table 22, reasons to choose social media for filed complaints are examined. Female from 25-34 age groups wants to make aware other customers to types of people which they have

faced. Complaints on social media are visible to everyone. Thus, people who visit the airline's official profile would see the complaint. People will be aware of these types of problem that can also face during their journey with that airline. Despite it, 25% of people use social media because he knows only this way of complaint.

Table 23 is based on a survey 7.4d. The aim of question 7.4d was observed, how much social media was convenient for the customer who used it as a complaint tool.

**Table 23: How convenient Social Media as Complaint Tool**

Options	Male		Female		Do not want to state		Overall	
	35-44	%	25-34	%	Responses	%	Total	%
Very ease	1	33.33%	1	33.33%	1	33.33%	3	100%
Total	1	100%	1	100%	1	100%	3	100%

100% of participants agreed that it was effortless to use social media as a compliant tool and for file complaint against an airline.

#### 4.8 Response from the Airline Company

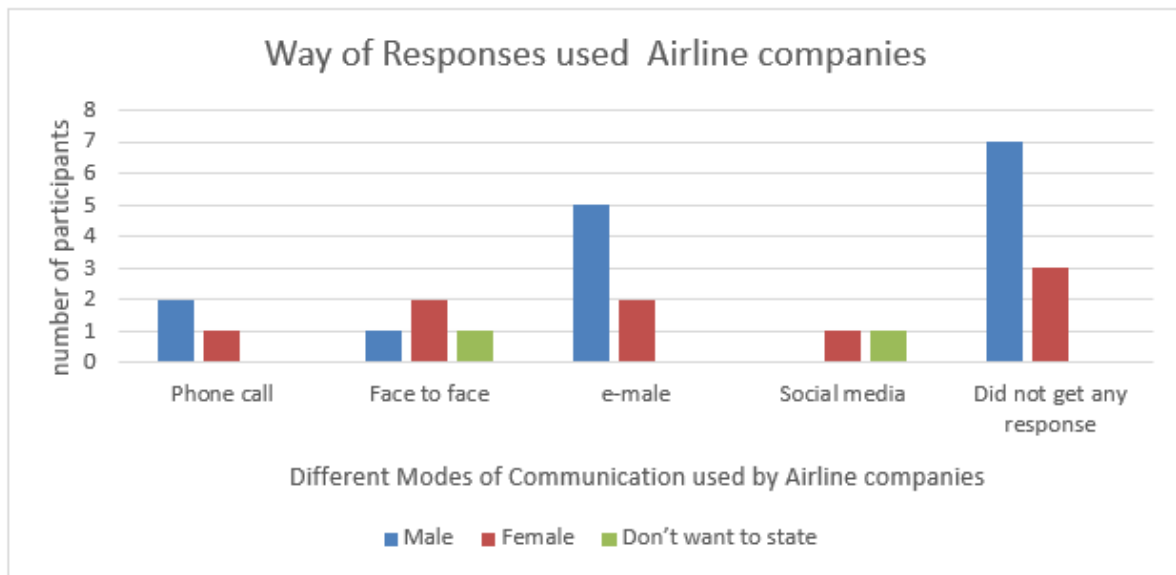
Which mode of communication was used by the airline company to solve the customers' problem, examined in this subsection? This subsection is based on survey question 7.5. Tables 24, 25, 26, and figure 20 represent the collected data from survey question 7.5. The aim of the survey question to examine how airline company gave responses to the customers.

**Table 24: Participants Received Responses Through the Airline Companies (Gender)**

Responses	Male		Female		Do not want to state	Total	
	Responses	%	Responses	%	Responses	Total	%
Phone call	2	13.33%	1	11.11%		3	11.54%
Face to face	1	6.67%	2	22.22%	1	4	15.38%
e-mail	5	33.33%	2	22.22%		7	26.92%
Social media			1	11.11%	1	2	7.69%
Did not get any response	7	46.67%	3	33.33%		10	38.46%
Total	15	57.69%	9	34.62%	2 (7.69%)	26	100%

The first column of Table 24 represents the mode of communication used by airline companies. The next two columns are separated into two sub-columns that represents the

responses and percentage of airline companies. The last column represents the overall data and percentage. 26% of people received an answer through e-mails, that is the highest rate. The surprising data are that, 7% of participants received a response through social media as well. Moreover, 38% of people never received any response from the airline companies after made complaints.



**Figure 20: Response from the Airline companies**

Figure 20 represent responses received from airline companies. The vertical axis of the graph shows several participants received responses. The horizontal axis shows the way used by the airline company for giving the response. The different colours indicate different genders, like the blue bar male, red bar female and green bar represent the people who do not want to state their gender. Table 25 represents the data of received responses of male participants and separated by their age groups.

**Table 25: Male Participants Received Responses from Airline Companies**

Male	18-24		25-34		35-44		45-54		Overall	
	Responses	%	Responses	%	Responses	%	Responses	%	Total	%
Phone call			1	20%	4	50%			5	31.25%
Face to face	1	100%					1	50%	2	12.50%
e-mail			2	40%	2	25%			4	25%
Social media					1	12.50%			1	6.25%
Did not get any response			2	40%	1	12.50%	1	50%	4	25%
Total	1	6.25%	5	31.25%	8	50%	2	12.50%	16	100%

Male from 25-34 age group received 40% responses through e-mails, and 40% never received any responses. 50% male from the 35-44 age group received responses by phone calls. The most surprising data are that 6% of males received responses from social media of the airline companies. It clear that airline companies keep their eyes on social media's account as well and tries to solve the problem of customers. Table 26 represents the data of female participants separated by their age group.

**Table 26: Female Participants Received Responses from Airline Companies**

Female	18-24		25-34		35-44		Total	
Way of responses	Responses	%	Responses	%	Responses	%	Responses	%
Phone call					2	75%	2	22.22%
Face to face			1	20%	1	25%	2	22.22%
e-mail	1	100%	2	40%			3	33.33%
Social media			1	20%			1	11.11%
Did not get any response			1	20%			1	11.11%
Total	1	11.11%	5	55.56%	3	33.33%	9	100%

11% of females received responses through social media and had aged between 25 and 34. Majority of the females' age between 35-44 had received responses through phone calls from airline companies. Overall, 11% of female never made complaints. 100% of people received responses through social media from airline companies.

Table 27 is based on survey question 7.5a. The aim of the survey question was to identify which social media site was used by the airline company to communicate with its dissatisfied customers.

**Table 27: Responses Through Social Media**

	Male 35-44	%	Female 25-34	%	Total	%
Facebook	1	50%	1	50%	2	50%
Total	1	50%	1	50%	2	100%

50% males and 50% females participants received responses through Facebook from the airline company. The male participants who received responses belonged to the 35 to 44 age group. On the other hand, the female participants who received responses though Facebook had aged between 25 and 34.

#### 4.9 Frontline Complaint Handling Staff

What were the customers feeling about the staff when they were lodging their complaints against airline companies. The airline company staff was eager to listen to the customer or not, is examined through survey question 7.6. the collected data is presented in tables 25,26 and 27.

How quickly airline company solve the problem of the customer is examined in this subsection. This subsection is based on survey question 7.7. The collected data is presented in tables 28, 29 and 30, figures 21 and 22. The aim of this question identifies how frequently airline companies solve customers' problem.

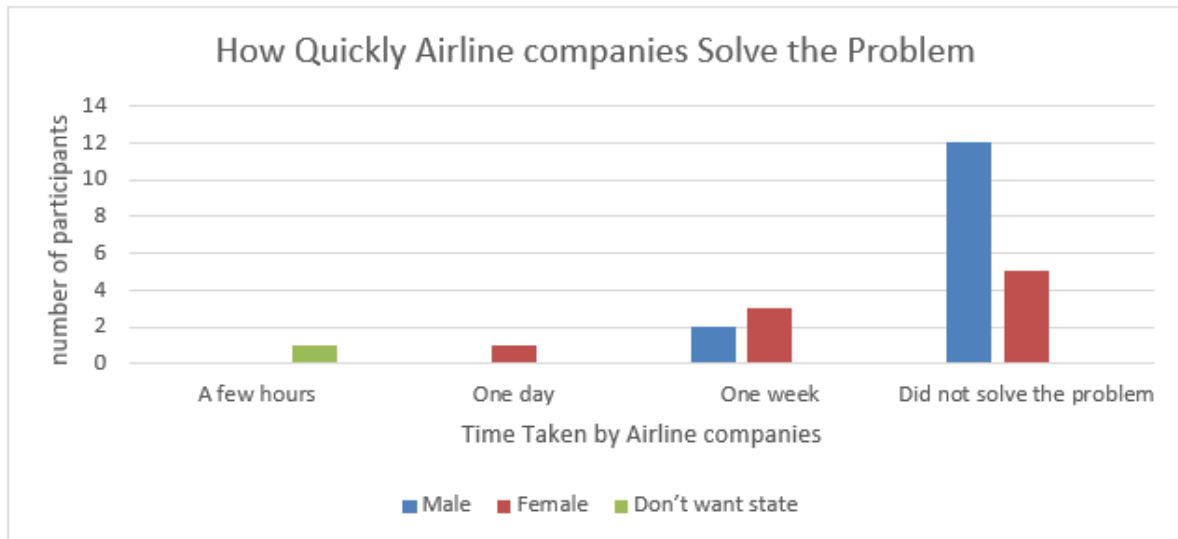
**Table 28: How Frequently Problem was Solved by the Airline Company**

Time for problem solve	Male		Female		Do not want to state	Overall	
	Responses	%	Responses	%		Responses	%
A few hours					1	1	4.17%
One day			1	11.11%		1	4.17%
One week	2	14.29%	3	33.33%		5	20.83%
Did not solve the problem	12	85.71%	5	55.56%		17	70.83%
Total	14	100%	9	100%	1	24	100%

The first column of table 28, represents the time period of problem solve. The second column shows the data of male participants. The next column shows the responses of females. The last column represents the overall data and percentage for each time period.



70% of participants mentioned that the airline company did not solve their problem. 20% had got a solution to their problem within one week. 33% of females and 14% of males received a solution within one week.



**Figure 21: How Quickly Airline Company Solve the Customers' Problem**

Figure 21 represents the time taken by airline companies to solve the customers' complaints. The vertical axis of the chart represents the number of participants and the horizontal time taken by an airline company for problem solutions. The different colours represent the demography. The blue colour represents the male, red females and green do not want to state gender participants. Most of the male participants did not get any solution to their complaints. The blue bar, (is higher than other bars) shows the majority of the male participants never got any solution for problems from the airline companies.

Table 29 represents the data of male participants. The data is separated by different age groups of male participants.

**Table 29: How Quickly Male Participants' Received Solution from Airline Companies**

Male	18-24	%	25-34	%	35-44	%	45-54	%	Total	%
One week			2	50%					2	14.29%
Did not solve the problem	1	100%	2	50%	7	100%	2	100%	12	85.71%
Total	1	7.14%	4	28.57%	7	50%	2	14.29%	14	100%

100% male from 18-24 age group never found any solution to their problem from an airline company. 50% of males from the 25-34 age group got a solution within one week and the rest of 50% never. 100% of the male from the 35-44 and 45-54 age group never acquired any solutions to their problems from the airline company. Overall, 14% found a solution to their problem within one week and the other 85% dissatisfied from the airline because their problem never solved.

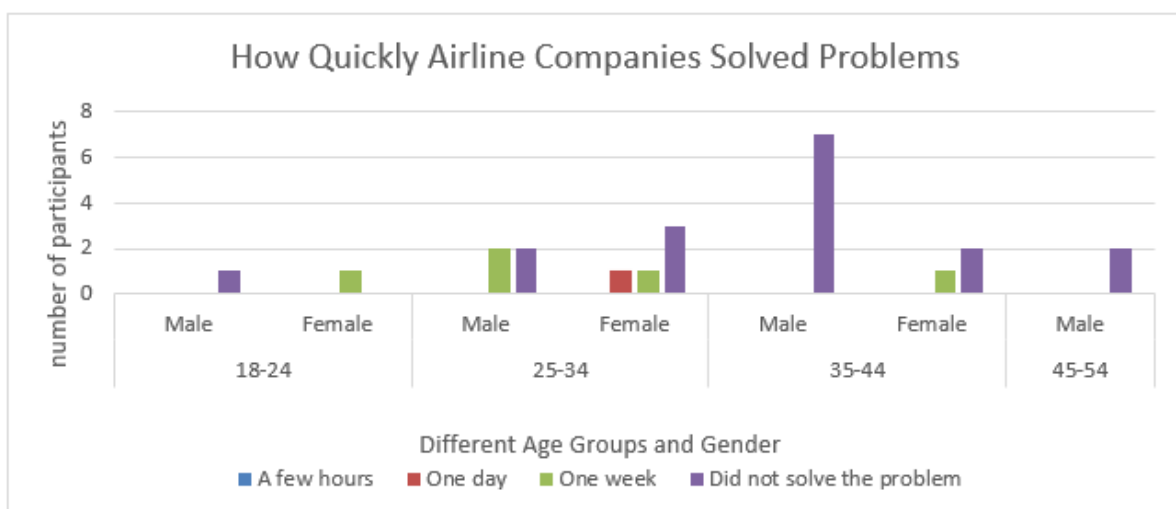
Table 30 represents the responses of female participants about the time taken by airline companies to the solution to the problem.

**Table 30: How Quickly Female Participants' Received Solution from Airline Companies**

Female	18-24	%	25-34	%	35-44	%	Total	%
One day			1	20%			1	11.11%
One week	1	100%	1	20%	1	33.33%	3	33.33%
Did not solve the problem			3	60%	2	66.67%	5	55.55%
Total	1	11.11%	5	55.55%	3	33.33%	8	100%

40% of females from 25 to 34 age group received a solution from the airline company within one day and one week, but 60% never. 66% of females from the 35-44 age group never got any solution; only 33% got within one week from the airline companies. In short, 55% of females never got any solution from airline companies after filed a complaint.

Figure 22 represents the period taken by airline companies to the solution of the problems of customers in a graph form.



**Figure 22: How Quickly Airline Companies Solved the Problems of Participants**

The vertical axis of the graph represents the number of participants and horizontal demography. The different colours show the time of problem-solving. The purple bar is higher than other bars means the majority of the participants never got any solution from the airline companies.

#### 4.10 Satisfied with the solution

This subsection is based on the survey question 7.8. With the help of survey question customer's satisfaction level is tried to measure. The collected data is presented in tables 31, 32 and 33. The aim of the survey question finds out how many participants were satisfied or dissatisfied with the provided solution of the airline company.

Table 31 represents the overall response for survey question 7.8. In the table detractor represent the dissatisfaction, passive represents the neutral and promoter represent satisfaction level of customers.

**Table 31: Satisfaction of Customers from Airline Companies**

	Male	%	Female	%	Do not want to state	Total	Percentage
Detractor	10	72.74%	7	77.78%	1	18	74.74%
Passive	2	13.63%	1	11.11%	0	3	12.63%
Promoter	2	13.63%	1	11.11%	0	3	12.63%
Total	14	100%	9	100%	1	24	100%

74% of participants were not satisfied with the airline's problem solution. 12.63% of participants gave natural responses. Other 12.63% satisfied with the answer. 72.74% male participants did not happy from the solution, 13.63% neutral and 13.63% satisfied with the solution. On the other hand, 77.78% females dissatisfied, 11.11% neutrals, 11.11% satisfied with the settlements.

Table 32 represents the responses of male participants for the survey question 7.8. The presented data is calcified by male participants' age groups.

**Table 32: Satisfaction of the Male Participants**

Male	18-24	%	25-34	%	35-44	%	44-54	%	Total	%
Detractor	1	100%	2	50%	5	71.43%	2	100%	10	71.43%
Passive			2	50%					2	14.29%
Promoter					2	28.57%			2	14.29%
Total	1	7.14%	4	28.57%	7	50%	2	14.29%	14	100%

100% male participants from 18-24 age group and 44-54 age groups were dissatisfied from the solution provided by the airline company. Male from 25-34 age group 50% were dissatisfied and 50% neutral from the provided solution. Overall, 71% of male participants were dissatisfied from the airline companies' solution and 28% satisfactory.

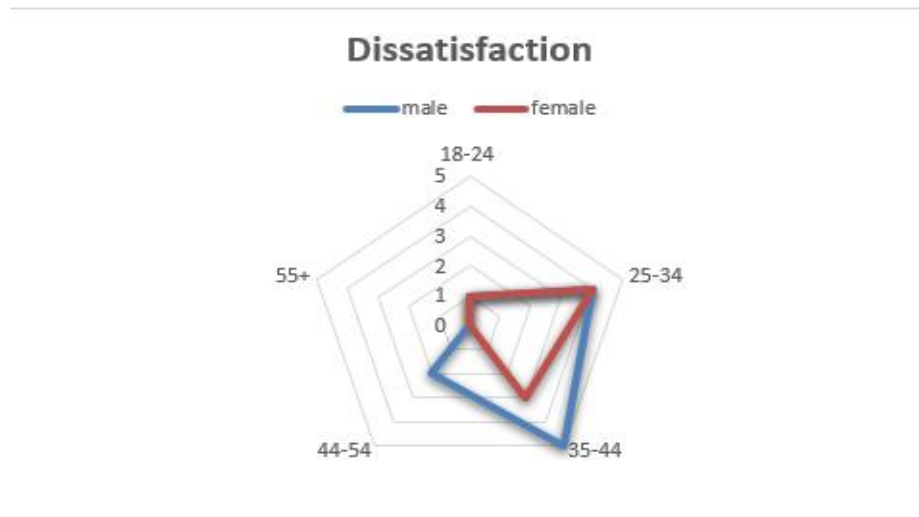
Table 33 represents the responses of female participants. The responses are classified by the different age groups of the female participants.

**Table 33: Satisfaction of the Female Participants**

Female	18-24	%	25-34	%	35-44	%	Total	%
Detractor	1	100%	3	60%	3	100%	7	77.78%
Passive	0	0	1	20%	0	0	1	11.11%
Promoter	0	0	1	20%	0	0	1	11.11%
Total	1	11.11%	5	55.56%	3	33.33%	9	100%

100% female from the 18-24 and 35-44 age groups were dissatisfied from the solution provided by airline companies. 60% female from the 25-34 age group dissatisfied, 20% neutral, and 20% satisfied with the given solution of the airline company.

Figure 23 represents the dissatisfaction level of male and female participants. 0 to 5 scale point represents the dissatisfaction level of participants. The highest point of the scale (number 5) shows the extremely dissatisfaction level of participants and 0 shows the lowest dissatisfaction.



**Figure 23: Dissatisfaction Level Participants by Age Groups and Gender**

Figure 23 explains the dissatisfaction level of the participants. The blue colour represents the male participants dissatisfaction level. The red colour represents the females' dissatisfaction level. Scale 0 shows the lowest dissatisfaction level while 5 highest. Male from 35 to 44 age group is most dissatisfied from the airline companies' services.

#### 4.11 Share Bad Experience with Others

This subsection is based on the survey question 7.9. tables 34, 35 and 36, figure 24 represents the gathered data of survey question 7.9. The aim of the survey 7.9 examined how many people share their problems with others because it creates positive or negative word of mouth.

Table 34 describes the data about how many participants shared their bad experiences with others.

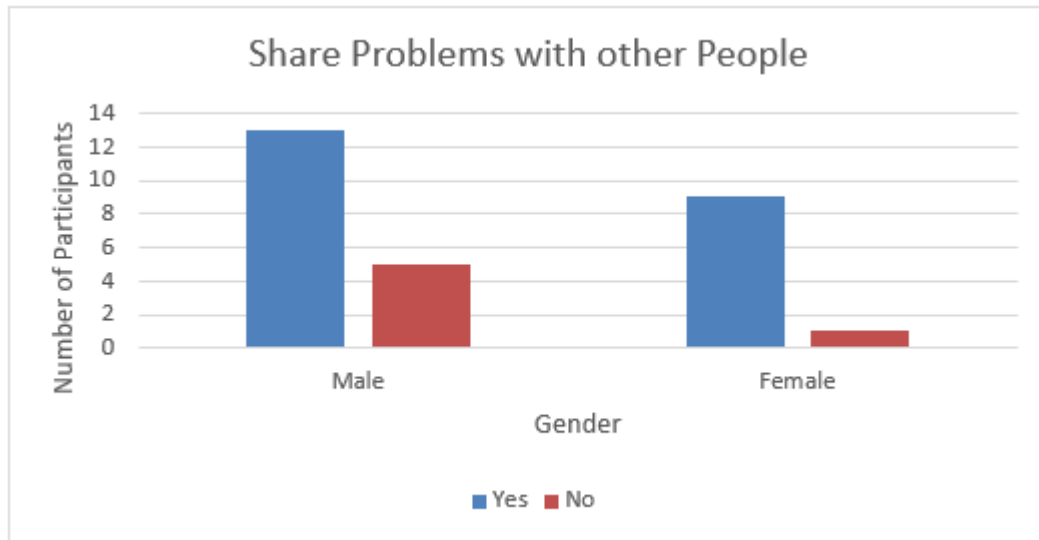
**Table 34: Share Problem with Others**

	Male	%	Female	%	Do not want state	Total	%
Yes	13	72.22%	9	90%	2	24	80.00%
No	5	27.78%	1	10.0%	0	6	20.00%
Total	18	60%	10	33.33%	2 (6.67%)	30	100%

The first column of Table 34 represents how many people agreed with the statement "Did you share your problem faced during air travelling with other people." Table 34 describes the data according to demography. According to the survey, 72% of male participants agreed that

they share their problem with others and the rest of 27% never. On the other hand, 90% of females shared their issues with others, and 10% never. Table 51 defines that 80% of people shared their problem with others, that affects other decisions while choosing an airline in future because people do not want to face.

Figure 24 represents the table 34's data in a bar graph.



**Figure 24: Share Problems' with Others**

The vertical axis of the chart shows the number of participants. The horizontal axis shows data according to demography. Different colours represent agreement and disagreement of the participants with the statement. Male participants, in comparison to females, shared their problem with others. On the other hand, most of the females shared their issues with others in the responses.

Table 35 represents male participants data that is separated by age groups.

**Table 35: Shared Problem with Others by Male Participants**

Male	18-24		25-34		35-44		44-54		Overall	
	Responses	%	Responses	%	Responses	%	Responses	%	Total	%
Yes	1	50%	3	60%	6	75%	3	100%	13	72.22%
No	1	50%	2	40%	2	25%	0	0%	5	27.78%
Total	2	11.11%	5	27.78%	8	44.44%	3	16.67%	18	100%

50% of the male from 18-14 age group shared their problem with others, but the rest of 50%

never. 60% male from the 25-34 age group and 75% from 35 to 44 age group shared their difficulties with other people. On the other hand, 100% male from 44-54 age group shared the problem with others.

**Table 36: Shared Problems with Others by Female Participants**

Females	18-24		25-34		35-44		Overall	
	Responses	%	Responses	%	Responses	%	Total	%
Yes	1	100%	5	83.33%	3	100%	9	90%
No	0	0%	1	16.67%	0	0%	1	10%
Total	1	10%	6	60%3	3	30%	10	100%

Table 36 represents the responses of female participants. 83% of females from 25-34 age groups shared their problems with others. 100% from 18-24 and 35-44 age groups females shared their bad experiences with other people.

#### 4.12 Mode of Sharing a Bad Experience with Others

This subsection is based on the survey question 7.9a. Frequently used method for share the bad experience about air travelling by the participants, examine in this subsection. Tables 37, 38 and 39, figure 25 represent the collected data of 7.9a survey question.

Table 37 represents the overall data of the survey question 7.9a. The data is classified by gender.

**Table 37: Way of Communicating with Others by Gender**

Way of communicating	Male		Female		Do not want to state	Overall	
	Responses	%	Responses	%	Responses	Total	%
Phone	4	21.05%	4	22.22%	1	9	21.43%
Face to face	8	42.11%	6	33.33%	2	16	38.10%
e-mail	0	0%	0	0%	0	0	0%
Social media	6	31.58%	4	22.22%	1	11	26.19%
Text	1	5.26%	3	16.67%	1	5	11.90%
Other	0	0%	1	5.56%	0	1	2.38%
Total	19	100%	18	100%	5	42	100%

The first column represents the different mode of communication used by the participants to share their bad experiences. The next three columns represent the demography data. The last column shows the overall data and percentage. 42% male and 33% of females shared their issues with others by talking to each other. Except this, 31% male and 22% of females used



social media to share their concerns about air travel. Overall, 26% of people leave comments or chat with others through social media for sharing problems with others.

Table 38 represents the data of male participants according to their age.

**Table 38: Use of Social Media for WOM by Male Participants**

Male	18-24	%	25-34	%	35-44	%	45-54	%	Total	%
Phone	1	33.33%	1	25%	2	16.67%	0	0	4	21.05%
Face to face	1	33.33%	2	50%	3	25%	2	66.67%	8	42.11%
e-mail	0	0	0	0	0	0	0	0	0	
<b>Social media</b>	<b>1</b>	<b>33.33%</b>	<b>1</b>	<b>25%</b>	<b>3</b>	<b>25%</b>	<b>1</b>	<b>33.33%</b>	<b>6</b>	<b>31.58%</b>
Text	0	0	0	0	1	8.33%	0	0	1	5.26%
Other		00	0	0	0	0	0	0	0	
Total	3	15.79%	4	21.05%	9	47.37%	3	15.79%	19	100%

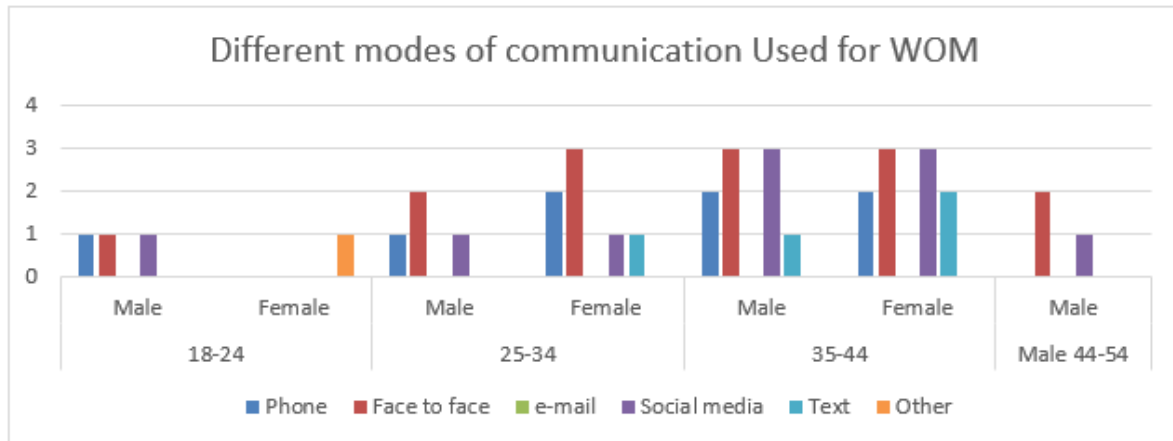
33% male from the 18-24 age group used social media and 33% face to face way to share their problems with others. Male from the 25-34 age group, 50% did verbal communication and 25% used social media. 33% male from the 45-54 age group used social media and 66% face to face communication to share their problems with others. Table 39 represents the responses of female participants.

**Table 39: Use of Social Media for WOM by Female Participants**

Age groups of Female	18-24		25-34		35-44		Overall	
Way of communication	Responses	%	Responses	%	Responses	%	Total	%
Phone	0	0%	2	28.57%	2	22.22%	4	23.53%
Face to face	0	0%	3	42.86%	3	33.33%	6	35.29%
e-mail	0	0%	0	0%	0	0%	0	0%
Social media	0	0%	1	14.29%	3	33.33%	4	23.53%
Text	0	0%	1	14.29%	1	11.11%	2	11.76%
Other	1	100%	0	0%	0	0%	1	5.88%
Total	1	5.88%	7	41.18%	9	52.94%	17	100%

42% of females from 25-34 age groups shared their problems, faced during air travelling, with others by talking to each other face to face while 14% used social media. Figure 25 shows the Table 37, 38 and 39 data in one graph.

Figure 34 represents the used mode of communication for shared bad experience about the airline company, used by different genders and their age groups.



**Figure 25: Mode of Communication Used by Participants**

Figure 25 shows, which way is frequently used for communicating with others by males and females according to their age groups. The vertical axis of the chart represents the number of participants and the horizontal demographic. The critical data is that people from all age groups shared the terrible experience with others by talking to each other face to face but between the age of 35 and 44 used social media in the same amount.

#### 4.13 Commonly use Websites for Share Experiences

This subsection is based on the survey question 7.9b. Tables 40, 41 and 42 represent data of survey question 7.9. The data is separated by participants' age and sex. The aim of the survey question to identify which website is preferred by participants.

**Table 40: Frequently used Social Media Websites for Share Experience**

Gender	Male		Female		Do not want to state	Overall	
Web sites	Responses	%	Responses	%	Responses	Total	%
Facebook	6	60%	3	50%	1	10	55.56%
Twitter	2	20%	00	0%	0	2	11.11%
YouTube	1	10%	2	33.33%	1	4	22.22%
Other	1	10%	1	16.67%	0	2	11.11%
Total	10	55.56%	6	33.33%	2 (11.11%)	18	100%

In Table 40, most frequently used websites are examined. The first column of Table 40 represents the websites and the next three responses of genders and percentage. The last column shows the overall data and percentage. 60% of males and 50% female used Facebook

to share their bad experience of the air trip with others. People shared a lousy incident in the form of negative comments and reviews, chat and call by using Facebook messengers. 20% of males used twitter and 10% you tube. On the other hand, 33% of females used YouTube. People shared their bad experience with others by uploading videos or leaving comments below the other videos. Overall, 55% of people preferred face book that is the majority of the participants. Females mentioned other websites like 'Wechat' and 'Weibo'. Male participants mentioned 'Reclama Aqui' websites to share a bad experience with others.

Table 41 represents the data of male participants with different age groups.

**Table 41: Social Media Websites used by Male Participants by Age Groups**

Age groups of males	18-24		25-34		35-44		44-54		Overall	
Websites	Responses	%	Responses	%	Responses	%	Responses	%	Total	%
Facebook	1	50%	1	50%	3	75%	1	50%	6	60%
Twitter	0	0%	1	50%	1	25%	0	0%	2	20%
YouTube	1	50%	0	0%	0	0%	0	0%	1	10%
Other	0	0%	0	0%	0	0%	1	50%	1	10%
Total	2	20%	2	20%	4	40%	2	20%	10	100%

Table 41 shows the age group of males using which website the most. The first row of the table indicates all-male participants that are divided by their age groups. Male from every age group used Facebook more than other websites. 50% male from each group used face group, but 35 to 44 age groups male used 75% for sharing their bad experience with others.

Similarly, Table 42 represents female participants data in tabular form.

**Table 42: Social Media Websites used by Female Participants by Age Groups**

Age groups of females	25-34		35-44		Overall	
Websites	Responses	%	Responses		Total	
Facebook	1	100%	2	40%	3	50%
Twitter	0	0%	0	0%	0	0%
YouTube	0	0%	2	40%	2	33.33%
Other	0	0%	1	20%	1	16.67%
Total	1	16.67%	5	83.33%	6	100%

Same as the male participants' females also preferred Facebook to share the bad experience more than other social media websites. 100% from 25-34 and 40% of females from 35-44 age groups used Facebook. The surprising data is that 40% of females of the 35-44 age group used YouTube.

#### 4.14 Use Same Airline Company After the Solution of the Problem

This subsection is based on the survey question 7.10. the collected data of the survey question is presented in the tables 43, 44 and 45 figure 26. The aim of the survey question to examined would participants choose the same airline for the next flight after received the solution from the airline company.

Table 43 shows data according to the participants' sex based on the survey question.

**Table 43: *Would Participants use the Same Airline for Travel in the Future after the Solution to their Problem?***

	Male	%	Female	%	Do not want to state	Total	%
Yes	4	23.53%	1	10%	1	6	20.69%
May be	11	64.71%	6	60%	1	18	62.07%
No	2	11.76%	3	30%	0	5	17.24%
Total	17	100%	10	100%	2	29	100%

The first column of Table 43 represents the opinion for the select same airline for the next trip. The next three columns represent the sex of participants. The last column represents the overall data, according to the participants' sex. 23% of males and 10% of females considered that they would like to travel in the same airline after the solution to their problem on time. On the other hand, 64% of males and 60% females gave unclear responses because these participants are not sure they would travel or not with the same airline company in the future. Table 44 represents the male participants' data separated by their age group.

**Table 44: *Travel in Same Airline Responses by Male Participants***

Age group	18-24		25-34		35-44		45-54		Overall	
Would travel	Responses	%	Responses	%	Responses	%	Responses	%	Total	%
Yes	0	0%	3	60%	0	0%	1	33.33%	4	23.53%
May be	1	100%	1	20%	7	87.50%	2	66.67%	11	64.71%
No	0	0%	1	20%	1	12.50%	0	0%	2	11.76%
Total	1	5.88%	5	29.41%	8	47.06%	3	17.65%	17	100%

60% of males from the 25-34 age group would like to use the same airline, but 20% would never use the same airline company again. 87% of males from the 35-44 age group probably use the same airline in future. The majority of males were not sure whether they would use the same airline in the future for air travelling.

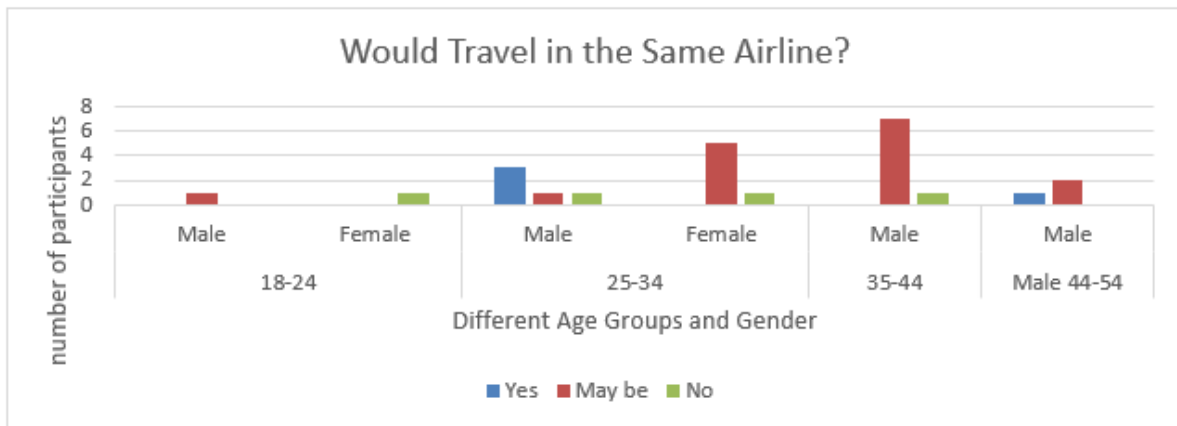
Data of female participants are defined in Table 45. The data is separated according to the female participants' age groups.

**Table 45: Travel in Same Airline Responses by Female Participants**

Age groups	18-24		25-34		35-44		Overall would	
Would travel	Responses	%	Responses	%	Responses	%	Total	%
Yes	0	0%	0	0%	1	33.33%	1	10%
May be	0	0%	5	83.33%	1	33.33%	6	60%
No	1	100%	1	16.67%	1	33.33%	3	30%
Total	1	10%	6	60%	3	30%	10	100%

33% of female participants from the 35-44 age group would use the same airline for next time, while 83% from the 25-34 age group probably use or not the airline. 100% female from the 18-24 age group never use the same airline for the next air trip.

The following figure 26 shows, tables 43, 44 and 45 data in a graphical form.



**Figure 26: Would People Travel in the Same Airline After the Solution to their Problem**

Figure 26 vertical axis represents the number of participants and horizontal demography. The different colours of bars show the opinion of participants. The blue colour bar shows the people like to travel in the same airline, red bars unsure people and green bars do not want to use the airline in future. Red bars of the graph show people are not sure and did not decide yet they will travel in the same airline or not.

#### 4.15 Negative Reviews

This subsection is based on the survey question 7.12. The collected data from the survey question is presented in tables 46, 47 and figure 27. Before the solution to the problem, some people give negative remarks to the airline companies on social media sites. The aim of survey question 7.12 to identify, after filing a complaint about how many people leave negative comments for airline company on social media while waiting for their solution.

Table 46 represents the data of the survey question according to the participants' sex.

**Table 46: Did Participants Give Negative Remarks to the Airline Company on Social Media**

Gender	Male		Female		Do not want to state	Overall	%
Gave remarks	Responses	%	Responses	%	Responses	Total	%
Yes	4	28.57%	4	50%	1	9	37.50%
No	10	71.43%	4	50%	1	15	62.50%
Total	14	100%	8	100%	2	24	100%

Table 46 shows how many participants gave a negative review on social media while delaying the solution of their problems' solution from airline companies. The 71% of males

never gave any negative remarks to airline company after filed their complaints. On the other side, 50% of females leave negative comments due to delay in the solution of their problems.

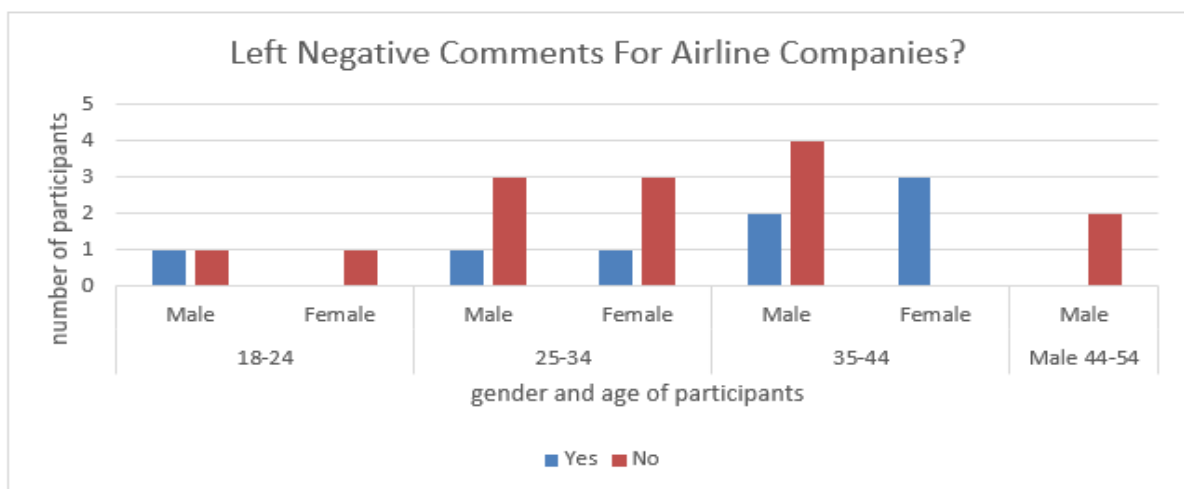
Table 47 represents the data of the survey question, separated by different age groups of the participants.

**Table 47: Did Participants Give Negative Remarks to the Airline Company on Social Media (Age Groups and Gender)**

Age groups	18-24		25-34		35-44		Male 44-54	Overall	
Gender	Male	Female	Male	Female	Male	Female	Male		
Gave remarks								Total	%
Yes	1 (50%)		1 (25%)	1 (25%)	2 (33.33%)	3 (100%)	0	8	36.36%
No	1 (50%)	1 (100%)	3 (75%)	3 (75%)	4 (66.67%)	0	2 (100%)	14	63.64%
Total	2 (9.09%)	1 (4.55%)	4 (18.18%)	4 (18.18%)	6 (27.27%)	3 (13.64%)	2 (9.09%)	22	100%

Table 47 represents the age group gave more negative remarks to airline company is examined. 50% male and 100% females from the 18-24 age group never gave any negative comments to any airline company after filed complaint and while waiting for the solution of the problem. 75% male and 75% females from the 25-34 age group agreed that they never give negative remarks to airline company on social media. On the other hand, 66% male from the 35-44 age group never wrote anything wrong for an airline company, but 100% of females did this.

The following figure 27 represents all the data in bar graph form.



**Figure 27: Negative Reviews gave by Participants on Social Media for Airline Company**

Figure 27 represents the number of participants who gave negative reviews on social media after file complaint, but the delay is responses or solution from airline companies. The vertical axis of the chart represents the number of participants and horizontal demography. The different colours represent the responses of participants. The blue colour represents the participants who gave negative remarks. The red colour shows the participants who never gave any negative comments to any airline after filing complaints. Majority of the participants never leave negative comments on social media except for 35-44 female age group.

#### 4.15.1 Replace negative review with positive

This subsection is based on the survey question 7.12a. The collected data from the survey question is presented in tables 48 and 49. After posting negative comments on social media, some people got a solution to their problem. Therefore, some people remove the negatives comments from social media. Some people replace the comments. How many people replace their negative remarks from social media after got solution from an airline company is examined in this section.

Table 48 presented data survey question according to the participants' sex.

**Table 48: Did Participants Replace Negative Reviews After Receive Solution**

	Male	%	Female	%	Do not want to state	Total	%
Yes	3	75%	3	75%		6	66.67%
No	1	25%			1	2	22.22%
Airline deleted/hide the comment			1	25%		1	11.11%
Total	4		4		1	9	100%

According to the survey responses, 75% of males replace their negative reviews with positives after getting a solution from airline companies. Similarly, 75% of females did the same as male participants. Overall, 66% of people remove their negative comments from social media.

Table 49 represents the responses of participants according to their age groups.

**Table 49: Did Participants Replace Negative Reviews After Receive Solution by Age Groups**



Age group	18-24		25-34		35-44		Total
Gender	Male	Female	Male	Female	Male	Female	
Yes			1 (100%)	1 (100%)	<u>2</u> (100%)	2 (100%)	6
No, still on social media	1 (100%)						1
Airline deleted/hide the comment		1 (100%)					1
Total	1	1	1	1	2	2	8

Participants from all age groups replace their negative reviews after getting the solution to their problems. Only one female from 18-24 said airline company deleted or hid their negative comments from social media after the solution of the problem.

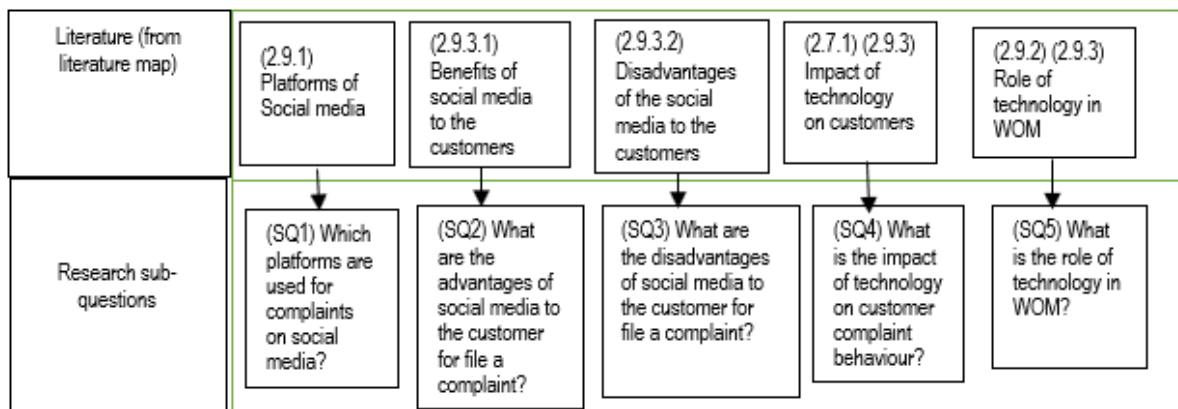
## 5 Discussion

To find the meaning of findings, quantitative analysis was applied in the previous section. In this section, the meaning behind the findings (data from literature and survey responses) is explained by the researcher. The aim of the discussion section is sharing the researcher's interpretation of the result and what was the previous understanding and knowledge about the research topic, and new perceptions that have raised because of this research.

The upcoming subsections link between research questions and literatures.

### 5.1 From the Literature

The aim of this sub-section is defining the role of literature in this research to create the hypothesis. The connection of literature and research questions and sub-questions are shown in figure 28.



**Figure 28. The link between Literatures and Research Sub Questions**

Figure 28 illustrates the link between literature and research sub-questions. The first column of figure 28 represents the literature and number heading from the literature map. The second column represents the sub-questions of research.

#### 5.1.1 Platforms of Social Media

Customers use a different way to reach out the airline companies for filing their complaints. In today's era, social media is overgrowing. Primack et al. (2019) define that some customers use social media for making the complaints. Alnsour et al. (2018) define the different platform of the social media that used for complaints such as Facebook, YouTube and Twitter. Grancay (2015) explained the number of fans on the official account on the

Facebook page represents the popularity of the airline company among the customers. On the other side, Balaji et al. (2015) state customers post their complaints and comments on the official Facebook of any airline company. According to Zelenka and Hruska (2018), YouTube is used to make videos to show the dissatisfaction to airline companies by unhappy customers. Istanbuloglu (2017) claims Twitter is used for the quick responses by the airline companies to their dissatisfied customers.

According to this survey, most of the people like to call centre or emails for making complaints. Participants gave preference for filing their complaints to airline companies are call centres, in persons and emails. According to the participants if their problems are not solved through these three ways, then social media used for complaints. Therefore, a few people use social media for making complaints, but the majority of people use social media to share their problem with other people. Facebook, YouTube, Twitter is the most popular social media platform in the people. The majority the people use Facebook to share their experience with others.

### **5.1.2 Benefits of Social Media to the Customers**

Istanbuloglu (2017) defines the advantages of social media to the customers. According to him, Social Media are accessible for the customer to make complaints and share experiences, as opposed to customers who do not know how to file a complaint against the airline companies. Those people take advantages from social media. Ater and Orloy (2015) explain that people can easily check other customers' comments on social media sites. Then, customers can easily identify how many customers are happy and unhappy with the services of that airline companies.

According to the people surveyed, the use of social media is straightforward as a complaint tool. People use social media anytime from anywhere. People interact with the company and other customers directly. Thus, social media are providing a platform for the customer to business and customer to customer. Customers can easily provide feedback to the company.

### **5.1.3 Disadvantages of Social Media for the Customers**

Zhou et al. (2018) describe the disadvantages of social media to the customers. If someone is complaining through the Social Media sites must wait for the response from airline companies. On the other hand, Melancon and Dalaksa (2018) explain that some companies want to show their responsibility and interest the customers problems and decrease the

response time for the customers. Therefore, companies send automatic messages to customers after complaints. Sometimes these automatic responses do not meet the expectation of the customers and make the customers disappointed. After that people have to wait for the real responses from the airline companies for a long time, that can be one day, week or month. Melancon and Dalakas (2018) identify that complaints on Social Media mislead the customers sometimes. Some people never delete their complaint that has been already solved by the airline companies.

Social media can be a useful platform for the customers and interact with companies and other customers, but people are not taking full advantages from it. Social Media also creates difficulties for the industries as well. If a dissatisfied customer shares bad experience on social media, this will work as a negative e-WOM. Some people never delete and replace their comments after solving their remarks. People who will read these comments do not know the customers' problem has been solved by the companies that show social media never provide pure analysis of any company.

People leave a positive and negative review on social media about the airline companies after the journey. People from all age groups like to use social media these days. Therefore, the positive and negative reviews work as word of mouth on social media. Thus, WOM has also converted into e-WOM. During the flight selection, people ignore other peoples' criticism because people give preference to the best price of the flight. Satisfied customers leave positive comments and dissatisfied negative reviews.

#### **5.1.4 Impact of Technology on the Customers**

Istanbulluoglu (2017) defines technology has an impact on customer complaint behaviours. Most people have cell phones and the internet. Therefore, people tend to give their opinion on every incidence. If anyone has disappointed or unhappy from any company or product and people want to complain, but due to insufficient time, people choose easy methods for complaints like social media. Technology has made everything ease for companies and customers. Gregoire et al. (2018) discusses that technology has increased the complaint behaviour among the customers because sometimes people complaints about the uncontrolled things to the airline company such as flight delayed due to the oil crises. This shows people do not want to analysis which complaint will be useful for the airline company and for them.

People have technology and devices in their hands, so they have an interest to just post everything on social media.

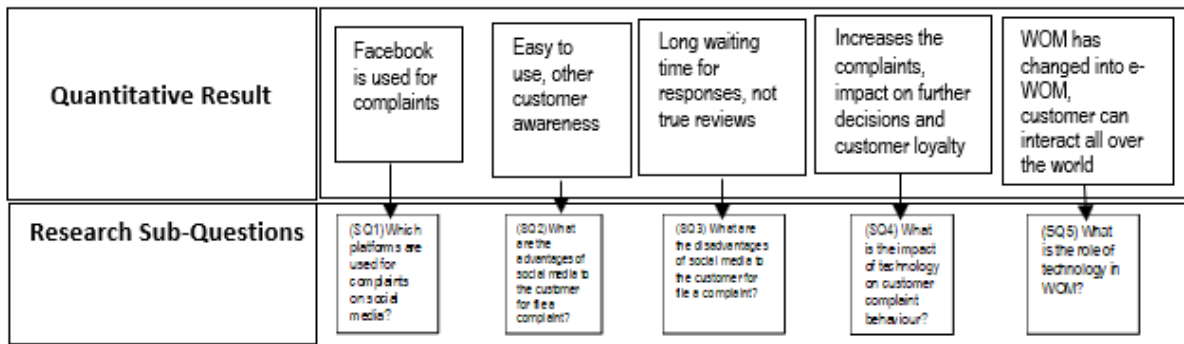
Companies can advertise their service and offers on social media and customers give reactions to every occurrence with positive or negative reviews. In the past, some people ignore the problem never shared their experience with others or filed their complaints.

#### **5.1.5 Role of Technology in WOM**

Dolan, Seo, and Kemper (2019) state that new technology has changed the WOM with E-WOM. People exchange their good and bad experience with other people by using the latest technology and devices such as the use of internet and gadgets. Sari and Allkilic (2016) explain, technology decrease the patience behaviour in the customers. If any dissatisfied customer does not want to waste it's time for complaining to the company, then customers gave negative reviews to the company on social media and other platforms. That impacts on company's reputation and other customers decision making. Beside this Alnjadat (2019) define a satisfied customer as one who posts positive reviews on Social Media site that impact on other customers positively because in today's era people make their decision after checking the other people's reviews on social media or other platforms. Xun and Guo (2017) clarify WOM have to impact on company's revenue as well.

## 5.2 From the Survey Answers

Quantitative analysis performed on the gathered data from the survey to examine the impact of technology in the airline industry. Figure 29 represents the link between the quantitative result and sub research questions.



**Figure 29: Quantitative Results and link between Research sub-Questions**

### 5.2.1 Facebook used for Complaints

Survey question number 7.4 represents the most used complaint methods by the participants. After analyses, the responses of survey question 7.4a and 7.4b participants used Social media as a complaints tool less than call centres and e-mails. Table 31 represents the data of survey question number 7.4. Table 34 shows the data of survey question 7.4a, and participants liked to use Facebook for the complaint to the airline company. While analyses data of survey question 7.4a Male participants aged between 35 and 44 used Facebook once to filed complaint to the airline company. Except this, the researcher noticed that females from 25 to 34 age group also used Facebook once for lodge complaint to an airline company.

### 5.2.2 Easy to Use

Based on the survey question 7.4c and 7.4d participants declared that the use of Facebook as a compliant tool was very easy. Table 37 is based on participants responses come from survey questions 7.4c and 7.4d. Male participants from 35 to 44 and females from 25 to 34 age groups agreed that the use of Facebook as a complaint tool was very easy and convenient to them. These participants agreed that Facebook could be a good complaint tool in the future for the airline companies 'customers to file their complaints.

### 5.2.3 Increases the Complaint Behaviour

This is very easy to use the social media platform as a complaint tool. Therefore, people complaints to the airline companies that might be not useful for airline companies to improve their services. Based on the survey question number 7.3 and 7.11. According to a participants use of social media as a complaint tool was very easy, therefore every disappointed customer wants to complain and show its unhappiness to the airline company by using social media. Based on the survey question number 7.3, most of the participants had a problem with a delayed flight. These participants do not know the reason behind the delayed flight, but all these participants made a complaint to an airline company for a delayed flight. These unhappy participants feedback can be useless for the company. Flight can be delayed due to bad weather conditions that are the uncontrolled situation to the airline companies. Table 28 represents the reasons for complaints and dissatisfaction of the customers. Participants filed their complaint because they have the technology and easy way to file their complaint in less time. Male and female participants aged between 35 and 44 made complaints about a delayed flight. Based on the survey 7.11 participants agreed that their complaint was not useful for the airline company. Table 66 represents the data survey question 7.11. Females from 18 to 34 and males from 25 to 34 age group agreed that their complaints and feedbacks were not useful for the airline companies. Thus, technology makes it easy to file a complaint to the airline company and increases complaint behaviour among the customers.

#### **5.2.4 WOM has changed into e-WOM**

Technology affects the way customers WOM because WOM has been turned into E-WOM. People use technology and modern gadgets for e-WOM. Based on the survey question 4, 5, 7.9, 7.9a, 7.9b, 7.12 and 7.13. Participants mentioned that they liked to check the other peoples' comments and reviews on social media before booking their tickets. Table 18 represents the data of survey question 4. The aim of question 4 is to identify how many people check other people's reviews on social media before booking their flight. Tables 21 and 22 show the data of survey question 5. The aim of question 5 is to identify how many people put positive or negative comments after their air trip. Males from 18 to 24 age group putting their experience on social media after the air trip. These positive or negative reviews work as e-WOM on Social Media and become the reason for decision changing to the other customers. Table 51 is based on survey question 7.9. According to 7.9 questions responses, the majority of the participants liked to share their good and bad experiences on social media. These shared experiences leave effects on other customers who read those experiences. Participants agreed that they used Facebook to share their experience with the airline

company. Table 54 and 57 provide the evidence for this statement, that is based on survey question 7.12 and 7.13.

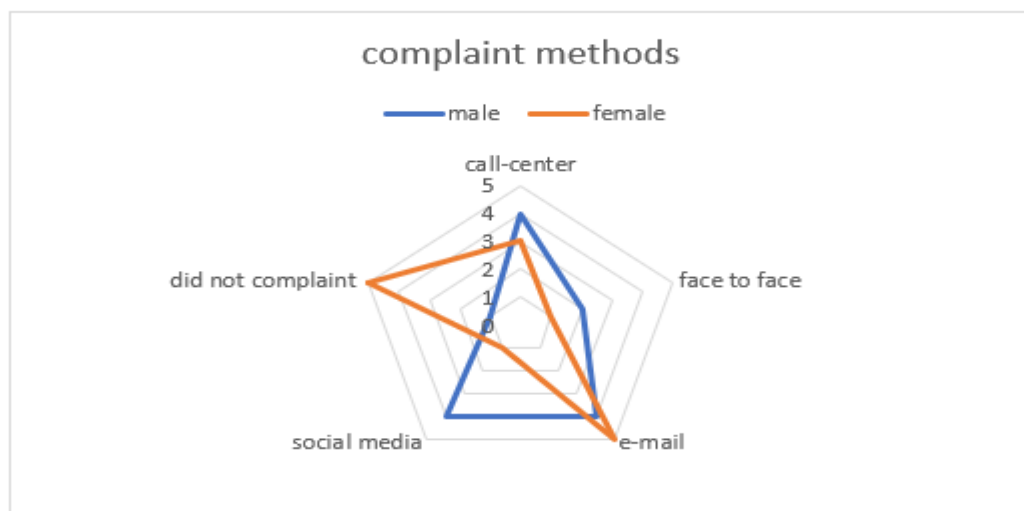
### 5.3 Qualitative Results from Gathered Data

Inductive reasoning has been applied for the qualitative results. The reason to applied Inductive reasoning is to identify logical reasons and connection between user stories and actual system used by the participants (Saunders et al., 2012).

#### 5.3.1 Participants Stories by Subgroups

The significant data is analysis in this sub section, according to different age groups and genders.

##### 5.3.1.1 Different Complaint Methods Used by Male and Female Participants

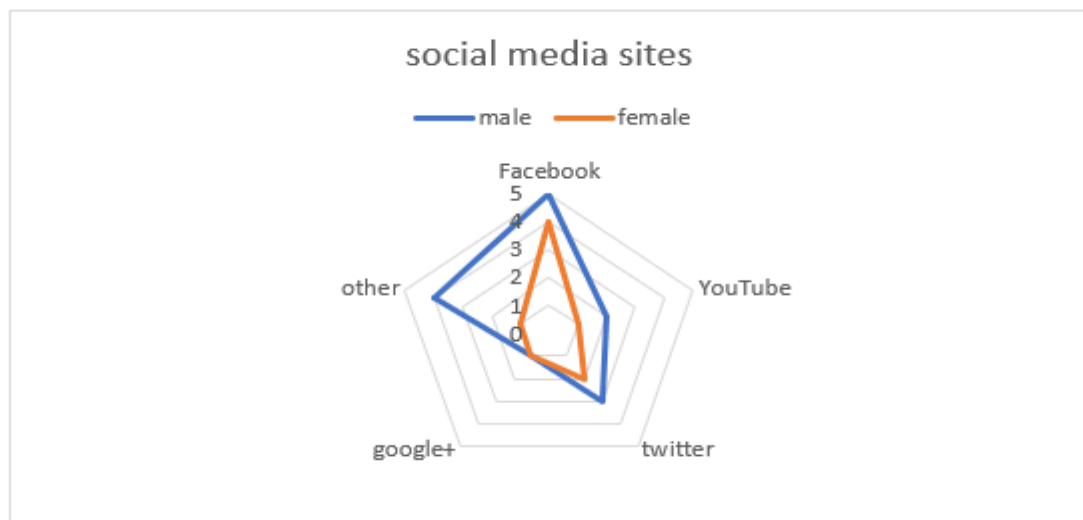


**Figure 30: Complaint Methods**

Figure 30 radar chart shows the frequently used complaint methods by the participants. A 0 to 5 points scale is used for represents the average used complaint methods by the participants. 0 scale shows the minimum used methods and 5 scale maximum. The blue colour is representing the male participants. The orange colour represents the female participants. Male participants used e-mails, call centres and social media websites for filling their complaints to the airline companies. On the other hand, most of the female participants did not file a complaint regarding their problems. Females participants who registered their complaints had used e-mail for complaining.



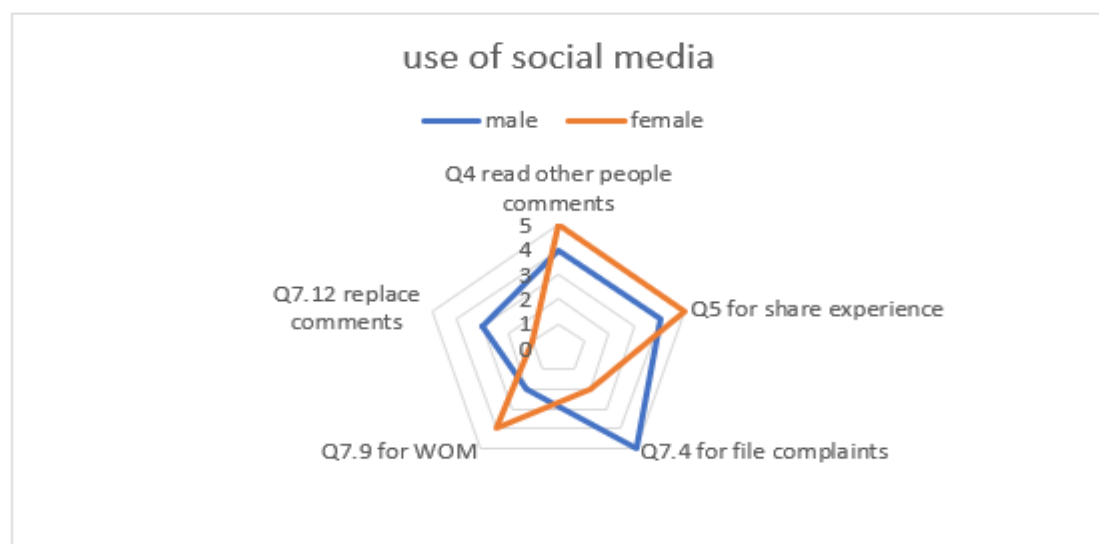
### 5.3.1.2 Frequently Used Social Media Websites



**Figure 31: Social Media Websites**

Figure 31 radar chart shows the frequently used social media website by the participants. A 0 to 5 point scale is used to represent the average of frequently used social media site by the participants. The blue colour represents male and orange female participants. Males and females used Facebook for different reasons, more than other websites. Apart from Facebook, male participants used twitter and other social media sites as well.

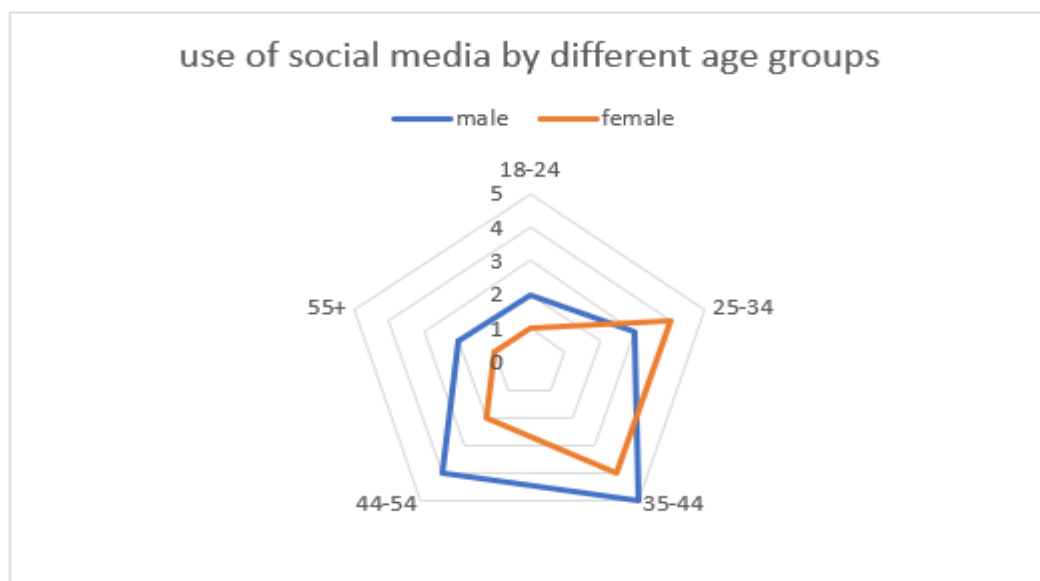
### 5.3.1.3 Use of Social Media Websites for Different Reasons



**Figure 32: Use of Social Media to Perform Different Task**

Figure 32 radar chart shows the use of social media for different reasons. A 0 to 5 point scale is used to represent the average use of social media sites for different tasks. 0 scale shows the minimum use of social media sites for the task. Scale 5 shows the highest use of social media sites for the task. This radar chart is based on five different survey questions. These five survey questions denote the reason for used social media. Males participants used social media to file their complaints. The female participants used social media sites to read other customers' comments and share their experience.

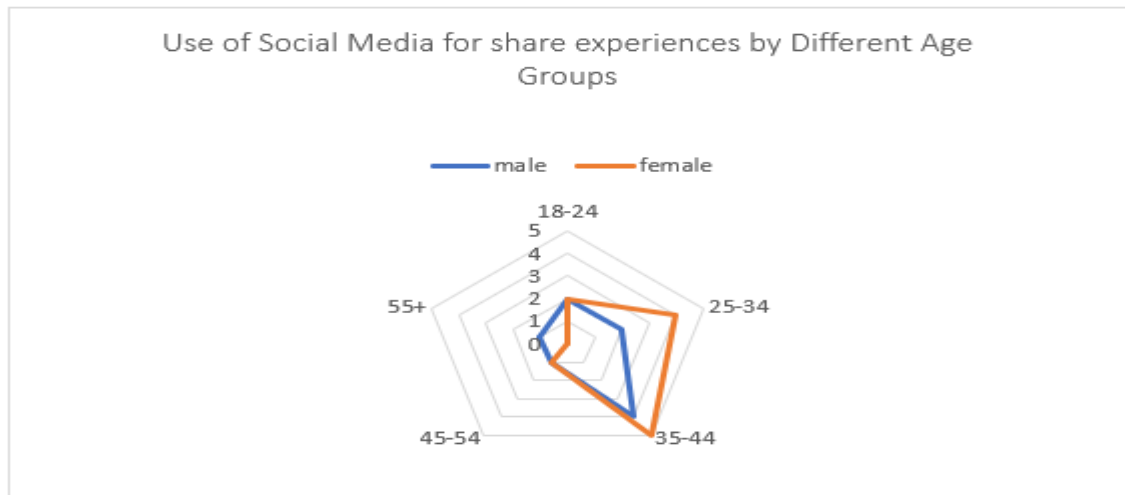
#### 5.3.1.4 Use of Social Media by Different Age Groups



**Figure 33: Used Social Media websites by Different Age Groups**

Figure 33 radar chart shows the different age groups of the participants who used social media for different reasons. 0 to 5 scale shows the average of participants to use social media according to their age groups. Scale 0 represents the minimum use of social media and scale 5 shows the high use of social media. Male participants from 35 to 44 age group used social media more than other age groups. Female participants between 25 and 34 age, used social media for various reasons more than other age groups.

#### 5.3.1.5 Shared Experience on Social Media by Different Age Groups



**Figure 34: Use of Social Media for share experiences by different age groups**

Most of the participants used social media to share the flight experience with others.

Therefore, Figure 47 radar chart represents the age group of participants who used social media websites. 0 to 5 point scale represents the average use of social media for sharing experiences. 0 point shows the minimum use and 5 point maximum use of social media sites for share experiences. The blue colour represents male and orange female participants. Male participants from 35 to 44 age group used social media website more than other groups. Females participants from same age group used social media to share their experiences.

### 5.3.2 Important things noticed

These important things have been noticed by the researcher from the gathered data:

- Multiple options are available:** The researcher noticed that dissatisfied customer has multiple options available to reach the company. This is proved the gathered data that unhappy customers prefer in-person complaint to the company (if possible), then call centre and emails. Nowadays, people prefer emails as complaint tool because people can use the email and response from the company as pieces of evidence. Email to the company is very easy and time saver tool for the customers. Customer from anywhere and any time can send the email to the customer regarding their problem. From the company perspective, the emails can be useful to analyses the data to identify the problematic area, reason and chance to improve the services. In the future, the company can minimise the complaint from that area.
- Facebook is most popular:** The gathered data indicate that people like to use Facebook more than other social media websites. This is proved from the literature

that the users of Facebook are increasing day by day. People use social media for different tasks. The researcher found that Facebook was not being used as the first priority for lodging their complaint. People had other sources to complaint an airline company. Dissatisfied customer used Facebook as complaint tool; then they did not receive any satisfaction responses from the company in their first attempt.

- **Performed multiple tasks:** Although social media was not the first choice to the dissatisfied customers to file a complaint, the customer used social media for different tasks. Customer used social media to share their good and bad experience regarding their air trip. Dissatisfied customer used social media for posting good and bad comments that worked as positive or negative e-WOM. Moreover, people who never post anything on social media regarding experience or complaint used social media to read other people comments before booking their flight.
- **Different age group perform different tasks:** Social media is being used by different age people to perform different tasks. The gathered data represents that females between 35 and 44 age group used social media to reading other people comments and post their good and bad experience. On the other hand, male from 35-44 remains more active more than other age groups. Age group from 25-34 were used social media for complaining and other tasks like posting their comments on the social media regarding their problems and experiences.
- **Easy for use:** Social media is easy for use as a complaint tool, according to the surveyed people. Customers, who use social media as complaint tool claimed that this was very easy to use social media to complain and reach out company.

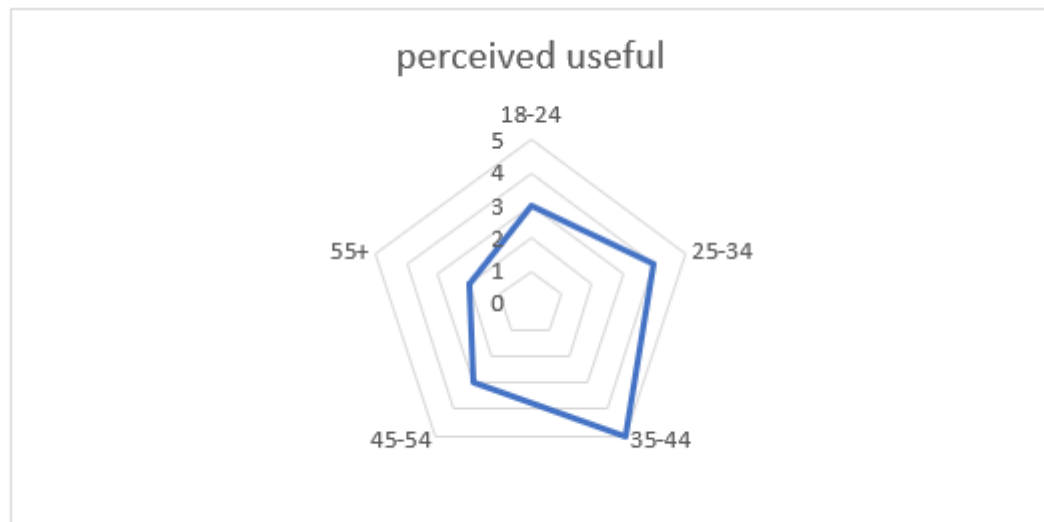
## 5.4 Hypotheses and Gathered Data

In this subsection analysis of hypotheses are presented. For the analysis of hypotheses data from survey and literature is used.

### 5.4.1 H1: Age has a positive impact on perceived useful

For this hypothesis H1, age has a positive effect on perceived usefulness. People from different age use technology differently and for various purposes. Technology is seen as helpful for different age groups. According to Carlquist et al. (2018), people from every age group use social media for a different purpose. The use of social media is increasing day by

day, according to the Statista survey report all over the world. Social media is useful for the people and business, so most of the people are using it.

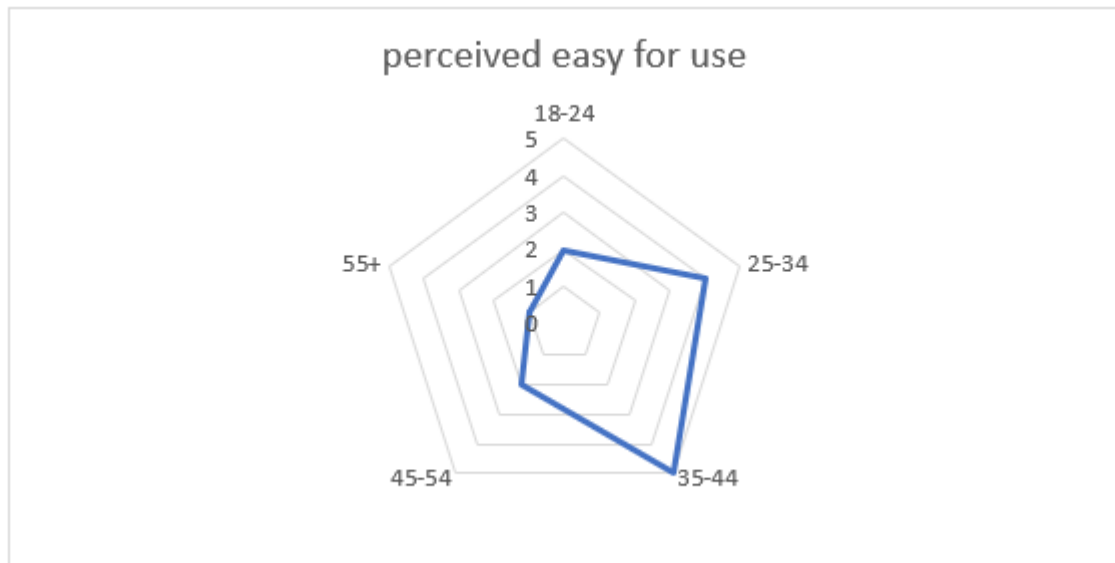


**Figure 35: Social Media Perceived Useful According to the Different Age Groups**

Radar chart 35 represents the age groups of the participants who claimed social media perceived useful for performing different tasks. A 0 to 5 point scale is used to show the average data. 0 point scale shows the minimum data and 5 highest. According to the survey data, people from 35 to 44 age group perceived social media is very useful. 25 to 34 age group people use social media more than age groups 45-54 people. Participants from all these age groups claimed that they used social media to share their experiences.

#### **5.4.2 H2- Age has a positive impact on perceived ease of use**

Social media, as a complaint tool, has a positive effect on perceived ease to use. According to Asatryan (2014), social media became popular very quickly all over the world among people from all age groups. Using social media is very easy for everyone. No unique skills and knowledge required to use social media. Therefore, people from every age groups fond of social media. Social media as a complaint tool perceived easy for use all age groups people. According to the research, people who remain busy with their work and no time to lodge their complaints through call centres and in person meeting, like to use social media.

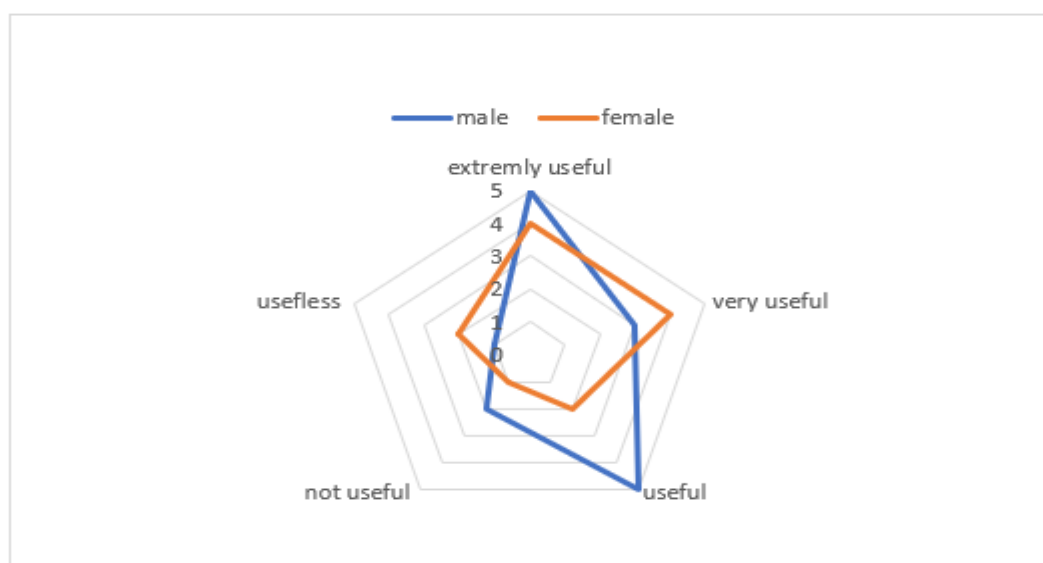


**Figure 36: Social Media Perceived Easy for Use by Different Age Groups**

Radar chart 36 represents data for perceived social media easy for use all age groups people. 0 to 5 point scale is used for the represents the average data for perceived useful. Radar chart shows people from 35 to 44 the perceived social media easy to use more than other age groups, for performing different tasks. People from every age group can use social media easily.

### 5.4.3 H3- Gender has a positive impact on perceived useful

According to Alnjadat (2019) et al., females are regular users of social media and perceived usefulness. After the research, this is clear that male use more social media than females.

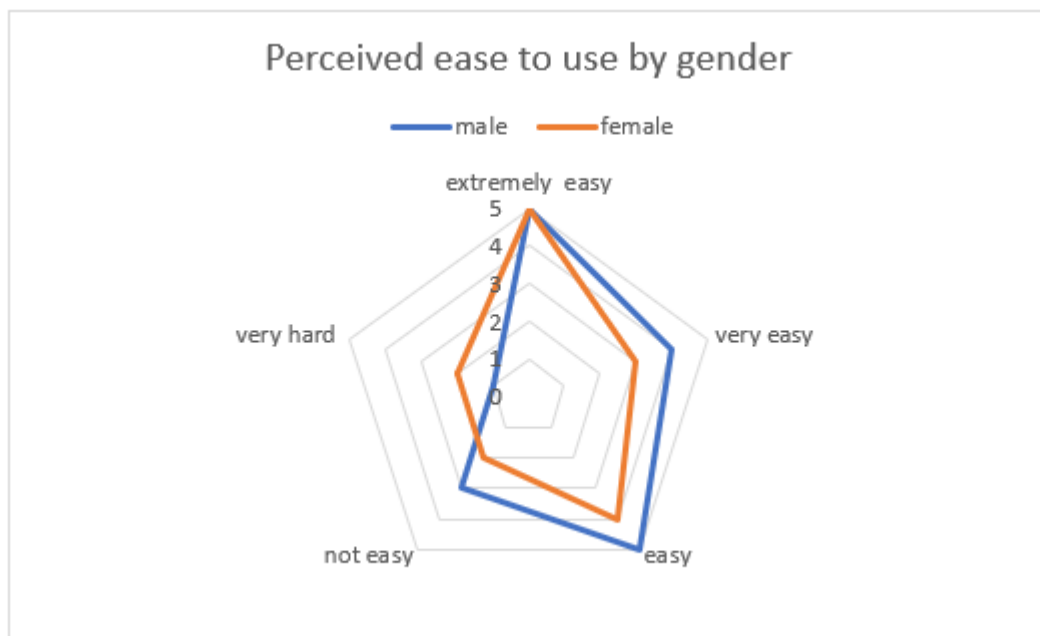


**Figure 37: Perceived Social Media Useful According Gender**

Figure 37 represents the perceived social media users, according to the genders. A 0 to 5 point scale of the radar chart shows the average data of participants. 0 scale shows the minimum and 5 represents the highest data for participants opinion. Male and female participants perceived social media is extremely useful for them to perform different tasks.

#### 5.4.4 H4- Gender has a positive impact on perceived ease to use

Males and females both agree with the statement of social media being perceived as easy to use for all genders. All gender use social media for different purposes (Hualong, Du, Le, & Tianshi, 2019). Social media is easy to use for both genders if using for complaining to the airline. Males and females agree that social media is straightforward to use for complaining to the airline companies.



**Figure 38: Perceived social media easy to use by gender**

Figure 38 represent perceived social media easy to use by males and females. A 0 to 5 scale point is used for represents the average data of participants. 0 scale shows the minimum data and 5 represent the highest data. Males and females perceived social media easy to use to perform their tasks.

#### 5.4.5 H5- Perceived ease of use has a positive impact on perceived useful

Social media is easy to use for every age group and gender. Everyone in this survey can easily use social media because the use of social media is easy with the help of smartphones.

In the past era, people had one way to communication mode with the airline companies. After the social media people can directly communicate with the staff and share their problems (Primack et al., 2019)

#### **5.4.6 H6- Perceived useful has a positive impact on behaviour intention to use**

Social media is very easy to use, but the use of complaint intention is not popular. Participants were not taking advantage of social media as a complaint tool. Therefore, the use intention of social media is not complaining against the airline. People use social media for other purposes as well. According to these participants negative or positive WOM does not have an effect because people choose airlines only according to their budgets (Bigne et al., 2018)

#### **5.4.7 H7- Perceived ease of use has positive impacts on behaviour intention to use**

Social media is straightforward to use, but people use it for different purposes. The majority of participants are using it only for entertainment and business use social media as a marketing tool. People are not using social media as a complaint tool for the airline industry. Still, people are using the call centre and in-person complaint to the airline industry. A few people use social media only to share their experiences with others.

#### **5.4.8 H8- Behaviour intention to use has positive impacts on actual system use**

People use social media as a complaint method. People are not using social media for complaining to the airline industry. Actual system is used for the complaining is call center and face to face. People are using emails as well for complaining to airline companies.



## 6 Conclusion

Dissatisfied customers always use an easy way to communicate with airline companies. In this digital era, customers have many choices to lodge their complaint to the airline company without wastage of their time. Social media is one of them, and customers use this method to reach the company and inform other customers about the problems. Apart from social media, customers use call centres, in-person complaint and emails to file their complaints. This is an analysis from this research customer using social media as a second option to file a complaint. Customers liked social media for e-WOM. People liked to read comments and compliments of other customers on social media. Customers had impacts on positive and negative e-WOM. On the other hand, some airline companies are not serious about customers' complaints, received through social media. Complaints on social media have a great impact on airline companies and other customers as well. These online public complaints affect the airline company's image and reputation. Posted complaints and negative WOM on social media easily go viral all over the world that warns other customers to be aware of the company services. Complaints on social media and negative WOM can easily decrease the revenue of the airline company. The frequently used social media websites are Facebook and Twitter. Facebook is popular for e-WOM among all customers. Twitter is popular for lodge complaints publicly against airline company, among the dissatisfied customers. emails are used for lodged private complaints to the airliner companies. Still, emails are most convenient, time saver and formal way to complaint an airline company, according to the research. "No rose without thorns" social media has several advantages but some disadvantages to the customers and companies. Social media and technology make lots of things easy to the customers and companies but brought some challenges as well. The big challenge to the companies to provide all information to its customer online and through social media. Companies always tries to avoid negative e-WOM and complaints on social media. These negative e-WOM and social media complaints can open invitation to the competitors. Thus, social media shows the weakness of companies openly all over the world.

There are some limitations of the research, that are discussed below in brief.

## **6.1 Limitations**

Although an online survey might be the most efficient cost-effective technique to gather information in a shorter period, it has its limitations which have been discussed below in brief.

### **6.1.1 Data Gathering and Small Sample Size**

Insufficient time for data gathering was one of the biggest concerns for this research project. As this research used an online survey to gather information, a period of four weeks to collect information would not be enough to gather accurate results from a broader audience. For the collection of the data more than four-week effect, the research report and researcher had to complete the research report within the given time. Due to short time researcher could not obtain sufficient responses for statistically significant. Unfortunately, the researcher used limited tools for analyzing the small sample.

### **6.1.2 Inefficient in Following Trends**

As this survey collects information at a certain point in time and not in intervals of time, it might not be able to generate results to identify certain trends in students in higher education.

### **6.1.3 Dishonest Results**

As an online survey was used to collect information, there is a possibility that participants may have been dishonest or biased in their answers, which could lead to distorted results.

### **6.1.4 Casual Responses**

To quickly complete the survey, participants may tend to skip through the questions and the potential options and choose an option that may be inaccurate.

### **6.1.5 Differences in Interpretation**

Every person interprets questions in their way. Hence, it is a possibility that the participant may interpret a question in a way different than the researcher and choose a response accordingly, which can lead to the generation of inaccurate results.

### **6.2 Possible Refinements**

Data collection, data analysis and discussion sections are included for possible refinement for this research. In the data, the collection section researcher felt that more effective and obvious question were to be included in the survey. For data analyses researcher used limited tool and techniques for analyses. The researcher could have used more techniques and analyses tools to improve data analyses. In the discussion, section researcher noticed that the discussion part was not clear and faced problems for analyses data and discussion. Therefore, the researcher needs possible refinement and should make clearer the concept of quantitative research.

### **6.3 Critical Analyses**

During the research, new experience was gained by the researcher. While research researcher learnt new lessons and skills such as the focus on research topic and way of express the topic. The composed data in report collected after studied and analysed several different articles. After studied several articles, the researcher became able to understand the research topic and way to express the data.

The hypotheses and research questions related to the airline industry was totally different and new for the researcher. The research affects the researcher's knowledge because, before the research, the researcher had limited knowledge for the airline industry and the role of social media in the industry. During the research, the researcher able to know the research models, hypothesis, literature map and research method quantitative research.

Sometimes, independent study became difficult for the researcher, but with the help of supervisors, the research possible complete. This was great and different experiences and attained knowledge.

## 7 Further Research

This research focuses on social media as a compliant tool in the airline industry. People use social media for communication with friends/family, give feedback to any brand, shopping, opinion for any company or services, e-WOM and share experiences with others. Further research could be the focus on the role of social media in the airline industry for e-marketing. Internet changes the meaning of traditional marketing for companies. This is the era of online marketing. Every company wants to online marketing to increase its customers. People spend their maximum time on social media. People from all over the world connect with each other through social media. Therefore, social media provide a platform for the companies to promote their business. In every organisation, customer relationship management works as a tool for building a strong relationship between company and customer. With the help of social media, customer relationship management offers discounts and special services to the customers to tempt. The objective for further research could be:

- Impact of e-marketing through social media in the airline industry.
- The role of e-WOM in e-marketing.
- The advantages and disadvantages of e-marketing through social media for the airline industry and customers.
- A most effective way for e-marketing on social media such as blogging, online advertisements, promotional messages or promotional videos.
- Cost of e-marketing impact on the company's budget.
- Role of social media in customer satisfaction from e-marketing.
- The common platform of social media is being used for e-marketing in the airline industry.
- Security and privacy issues of e-marketing through social media sites.
- Investigate the positive and negative impact of social media as a marketing tool on customers demographics: age, gender and education.

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## 9 Appendices

The data for this research gathered through survey and the following questions were used.

Based on following questions data gathered for this research.

The survey questions are present in the appendices section 9. The survey questions had some skip and loop logics. All the skip and loop logics are shown in figure 11.



chose the option ‘Yes’ then question number 1 displayed on the participant’s screen. All logics and options worked throughout the survey.

## 9.2 Survey Questions

7 questions were used for the survey, but all the questions have sub-questions. Based on the responses next questions appeared to the candidate.

Question number	Questions
Q1.	<b>To which age group do you belong?</b>
	<input type="radio"/> 0-17 <input type="radio"/> 18-24 <input type="radio"/> 25-34 <input type="radio"/> 35-44 <input type="radio"/> 45-54 <input type="radio"/> 55+
Q2.	<b>Please select gender.</b>
	<input type="radio"/> Male <input type="radio"/> Female <input type="radio"/> Other <input type="radio"/> Do not want to state
Q3.	<b>How often do you fly on a commercial airline?</b>
	<input type="radio"/> More than twice a week <input type="radio"/> Twice a week <input type="radio"/> Once per week <input type="radio"/> More than twice a month <input type="radio"/> Twice a month <input type="radio"/> Once per month

	<input type="radio"/> More than twice a year <input type="radio"/> Twice a year <input type="radio"/> Once per year <input type="radio"/> Once in three to five years <input type="radio"/> Once in five to ten years <input type="radio"/> Once in a lifetime <input type="radio"/> Never
Q4.	<b>How do you choose an airline company for travel?</b>
	<input type="checkbox"/> Best price <input type="checkbox"/> Best flight <input type="checkbox"/> Friends/relatives' recommendations <input type="checkbox"/> Social media reviews <input type="checkbox"/> Availability <input type="checkbox"/> Other <input type="text"/>
Q5.	<b>Do you share your experience on social media after air-travel?</b>
	<input type="radio"/> Always <input type="radio"/> Usually <input type="radio"/> Sometimes <input type="radio"/> Rarely <input type="radio"/> Never
Q6.	<b>Did you face any problem or made complaints about any airline?</b>
	<input type="radio"/> Yes <input type="radio"/> No
Q6.a	Please state the name of Airline
	_____.

	<b>Question regarding airline complaints (loop &amp; merge)</b>																																			
7.1	<b>Which airline company you were using for flying when you made a complaint, or face problems?</b>																																			
	State the name of airline _____.																																			
7.2	<b>Which type of travel class did you use, when you made a complaint or face a problem?</b>																																			
	<input type="radio"/> First-class <input type="radio"/> Business-class <input type="radio"/> Premium economy <input type="radio"/> Economy class																																			
Q7.3	<b>Which type of complaint or problem did you have?</b>																																			
	<table border="0"> <tr> <td></td><td>Misplace</td><td>Delayed</td><td>Lost</td><td>Damaged</td><td>Not Applicable</td></tr> <tr> <td>Luggage</td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td></tr> <tr> <td></td><td>Delayed/before time</td><td>Provided stuff</td><td>Staff behaviour</td><td>Cancellation</td><td>Not Applicable</td></tr> <tr> <td>Flight</td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td></tr> <tr> <td>Service</td><td>Service failure</td><td>Irresponsible staff</td><td>Catering</td><td>Bad food</td><td>Not Applicable</td></tr> </table>							Misplace	Delayed	Lost	Damaged	Not Applicable	Luggage	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Delayed/before time	Provided stuff	Staff behaviour	Cancellation	Not Applicable	Flight	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Service	Service failure	Irresponsible staff	Catering	Bad food	Not Applicable
	Misplace	Delayed	Lost	Damaged	Not Applicable																															
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Service	Service failure	Irresponsible staff	Catering	Bad food	Not Applicable																															
7.4	<b>You choose this method for complaint the airline company.</b>																																			
	<input type="radio"/> Call-centre <input type="radio"/> Face to face <input type="radio"/> E-mail <input type="radio"/> Social media <input type="radio"/> Text message <input type="radio"/> Did not complaint <input type="radio"/> Other <input type="text"/>																																			
7.4a	<b>Which social media site you were used for complaint?</b>																																			
	<input type="checkbox"/> Facebook <input type="checkbox"/> Twitter <input type="checkbox"/> YouTube																																			

	<input type="checkbox"/> Google+ <input type="checkbox"/> Other <input type="text"/>
7.4b	How many times did you complain on social media about the airline company?
	<input type="radio"/> Once <input type="radio"/> Twice <input type="radio"/> Thrice <input type="radio"/> More than thrice <input type="radio"/> Sometimes <input type="radio"/> Always
7.4c	Why did you choose social media to make a complaint?
	<input type="radio"/> It was very ease to use social media as a complaint tool <input type="radio"/> Airline company did not respond you email/call <input type="radio"/> You wanted to make other customer aware about these types of problems <input type="radio"/> This was the only way you know about the complaining <input type="radio"/> Others
7.4d	How ease was it for you to use social media as a complaint tool?
	<input type="radio"/> Very ease <input type="radio"/> Ease <input type="radio"/> Neither ease nor difficult <input type="radio"/> Difficult <input type="radio"/> Very difficult
7.5	How did the airline company respond to you?
	<input type="radio"/> Phone-call <input type="radio"/> Face to face



	<input type="radio"/> E-mail <input type="radio"/> Social media <input type="radio"/> Text message <input type="radio"/> Did not get any response <input type="radio"/> × Not Applicable <input type="radio"/> Other
7.5a	You received respond through this social media site.
	<input type="checkbox"/> Facebook <input type="checkbox"/> YouTube <input type="checkbox"/> Twitter <input type="checkbox"/> Google+ <input type="checkbox"/> Other
7.6	<b>You felt the airline company staff wanted to solve your problem as soon as possible.</b>
	<input type="radio"/> Strongly agree <input type="radio"/> Agree <input type="radio"/> Neutral <input type="radio"/> Disagree <input type="radio"/> Strongly disagree <input type="radio"/> × Not Applicable
7.7	<b>How much time was taken by the airline company to solve your problem?</b>
	<input type="radio"/> A few hours <input type="radio"/> One day <input type="radio"/> One week <input type="radio"/> More than one week <input type="radio"/> Did not solve the problem

	<input type="radio"/> × Not Applicable
7.8	<b>Overall satisfaction your problem's solution from the Airline company.</b>
	<div>Strongly Dissatisfied</div> <div>0      1      2      3      4      5      6      7      8      9      10</div> <div> <input type="radio"/>    <input type="radio"/>    <input type="radio"/>    <input type="radio"/>    <input type="radio"/>    <input type="radio"/>    <input type="radio"/>    <input type="radio"/>    <input type="radio"/>    <input type="radio"/>    <input type="radio"/> </div> <div>Neutral</div> <div>Strongly Satisfied</div>
7.9	<b>Did you share your problem or complaint with other people?</b>
	<input type="radio"/> Yes <input type="radio"/> No
7.9a	<b>How did you share?</b>
	<input type="checkbox"/> Phone <input type="checkbox"/> Face to face <input type="checkbox"/> E-mail <input type="checkbox"/> Social-Media <input type="checkbox"/> Text message <input type="checkbox"/> Others
7.9b	<b>Which social media site you used to share your problem with others?</b>
	<input type="checkbox"/> Facebook <input type="checkbox"/> Twitter <input type="checkbox"/> YouTube <input type="checkbox"/> Google+ <input type="checkbox"/> Other
7.10	<b>If your problem is solved then, would you travel on the same Airline after the solve your problem?</b>
	<input type="radio"/> Yes <input type="radio"/> May be <input type="radio"/> No <input type="radio"/> × Not Applicable
7.10a	<b>Why would you not travel with the same airline after solving your problem?</b>
	<input type="checkbox"/> Did not solve my problem on time

	<input type="checkbox"/> Do not want to waste my time for complaint the airline company again and again <input type="checkbox"/> Not satisfied with the solution <input type="checkbox"/> Do not want to face more problems <input type="checkbox"/> Bad experience <input type="checkbox"/> Other
7.11	<b>Do you feel your complaint can be useful for the airline company to improve its services?</b>
	<input type="radio"/> Extremely useful <input type="radio"/> Moderately useful <input type="radio"/> Slightly useful <input type="radio"/> Neither useful nor useless <input type="radio"/> Slightly useless <input type="radio"/> Moderately useless <input type="radio"/> Extremely useless <input type="radio"/> × Not Applicable
7.12	<b>Did you give any negative reviews on social media before solving your problem?</b>
	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> × Not Applicable
7.12a	<b>Did you replace your negative review with positive review on social media after solving your problem?</b>
	<input type="radio"/> Yes, I have replaced the negative reviews <input type="radio"/> No, It is still on social media <input type="radio"/> No, Airline company has delete/hide my negative reviews
7.13	<b>Will you recommend this airline to others?</b>
	<input type="radio"/> Definitely yes <input type="radio"/> Probably yes

	<input type="radio"/> Might or might not <input type="radio"/> Probably not <input type="radio"/> Definitely not
7.14	Did you face any other problem or made a complaint about any airline company except this?
	<input type="radio"/> Yes <input type="radio"/> No

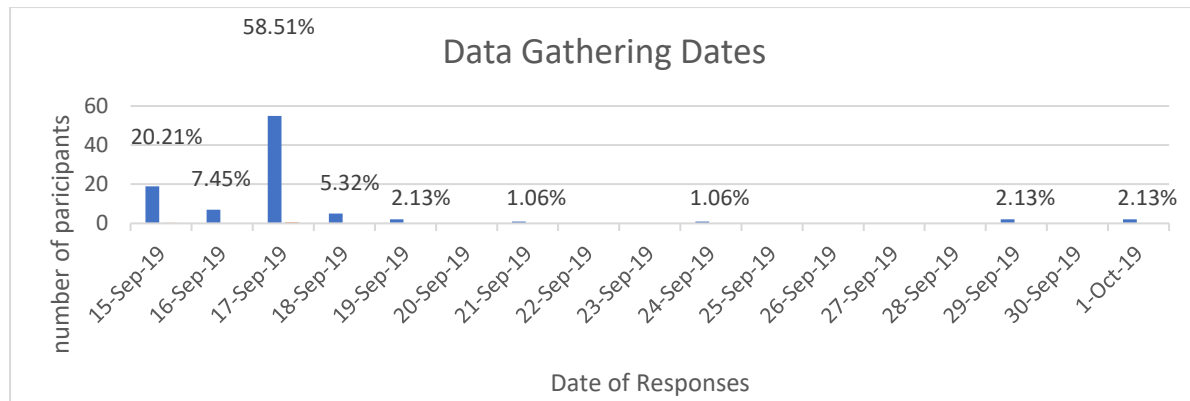
### 9.2.1 Response Rate

The survey was started on 15<sup>th</sup> September 2019, and the researcher shared the survey link with emails and social media. Table 11 shows the data gathering these dates. The survey started on 15 September 2019 and closed on 1 October 2019. All responses were recorded in the survey tool and presented in tables and graphs. The first column of Table 11 shows the data gathering date. The second column represents the responses, and the third column shows the percentage of the data.

**Table 50: Response Rate by Date**

Date	Responses	Percentage
15-Sep-19	19	20.21%
16-Sep-19	7	7.45%
17-Sep-19	55	58.51%
18-Sep-19	5	5.32%
19-Sep-19	2	2.13%
21-Sep-19	1	1.06%
24-Sep-19	1	1.06%
29-Sep-19	2	2.13%
1-Oct-19	2	2.13%
Overall	94	100%

20% of people took part in the survey on the first day and 2% last day. The review was on peak 17 September, because 58% of people participate in the survey.



**Figure 40. Response Rates by Date**

The response rate is shown in the bar chart. Around 80% of participants took part in the survey 15 and 17 September. Maximum data collected on 17 September 2019.

### 9.2.2 Quit Questions

Table 11 shows the participants quit on which survey question. Some conditions and logic were used for creating the survey question. For example, in the participant's consent question, if the participant clicks 'No' button, it means the participant does not agree with all term and conditions of the researchers. After click on 'No' skip logic works, and participants will out of the survey. Thus, all the skip and loop logic worked during the survey. At which question participants participant skip the survey, defined in table 11 with the number of participants and percentage.


**Table 51: Exit Question of Participants**

S.no	Question	Leave Participants	Percentage
1.	Participant consent	1	1.06%
2.	Age group	2	2.13%
3.	Frequency	2	2.13%
4.	Name of Airline	69	66.77%
5.	Face other problem	27	28.72%
6.	Face another problem (2nd time)	3	3.19%
7.	Overall	94	100%

1% of people dropped out in the first question that was about consent from the participants. 2% of the people were under 18, and 2% never experience air travel in their life. Therefore, those participants were not eligible to take part in the survey. Then 66% of participants left the survey after dropped an airline company because they never face any problem or made a

complaint against during or after travelling. 28% of participants faced problems, and some of them filed complaints as well.

### 9.3 Ethic Form

	<p><b>Research and Postgraduate Office (RPGO)</b></p> <p><b>Human Ethics in Research Group (HERG)</b></p>
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### **LOW RISK HUMAN ETHICS IN RESEARCH APPLICATION FORM**

Please refer to the [Ethics Guidelines](#) prior to completing this application.

The RPGO is located at the City Campus, D-Block (Offices D2.22 – D2.24), email [research@wintec.ac.nz](mailto:research@wintec.ac.nz) or phone Megan Allardice on Ext. 3582 for more information.

Please see the last page of this document for detailed instructions for completing this form.

#### **1.0 PROJECT TITLE**

	<b>Impact of Customer Reporting on Airline Business</b>
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#### **2.0 RESEARCHER(S)**

2.1	Primary researcher's name	Suman Bala
2.2	School//Centre/Unit	Centre of Business and Information Technology
2.3	Contact Details (Telephone and E-mail)	Telephone: +64221035940 E-mail: bala77922@gmail.com
2.4	Is this application a:	<input checked="" type="checkbox"/> Student Application <input type="checkbox"/> Staff Application
2.5	If this is a student application, please provide the Module code here	INFO803
2.6	Is this project a staff application that utilises work partially or wholly undertaken by students who are not participants (e.g. data collection undertaken by a researcher's class)?	No

2.7	If so, please clearly describe what the role of these students is to be in this research, what the work will be used for explicitly (including any issues regarding authorship of research outputs such as journal articles), and what steps have been taken to ensure students are aware of this.	Not applicable
2.8	Name of other Researcher(s) and positions. (If this is a student application, please provide the name(s) of the project supervisor(s) and indicate that they are supervisors here.)	Dr Kay Fielden
2.9	Contact Details of other researchers and supervisors  (Telephone and E-mail)	E-mail: Kay.Fielden@wintec.ac.nz
2.10	Is this application:	<input checked="" type="checkbox"/> A new application  <input type="checkbox"/> A subsequent approval request following a significant change to an already approved application

### 3.0 PROJECT TIMELINE

	<p>The projected start date for <b>data collection</b> (<i>once this ethics application is approved. Please note, projects can only begin once applications have been approved, regardless of the level of risk</i>):</p> <p>Projected end date: End of semester 2019</p>
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### 4.0 PROJECT SUMMARY (please include your research purpose and objectives, the methodology will be dealt with in Section 6)

<p>This study is regarding customer satisfaction and what are the factors that impact on an airline business in reporting customer service. This research project will also focus on the effects after reporting and benefits for customer and challenges to the airline companies. A research model based on the TAM model (Technology Acceptance Model) will be used for quantifying the results and retrieving answers to the research questions.</p>
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## 5.0 PROJECT METHODOLOGY (including methods for data collection)

An online survey (20 questions) will be used to get the opinion, reasons and level of satisfaction of airline customers. Qualtrics online survey system is used for the survey. For this research a population size of 4,926,400 will be considered an interval of 4 and a confidence level of 95%, hence generating a sample size of 600. This research will use online tools to analyse the result and retrieve the answer to the research questions.

## 6.0 CONSIDERATION OF ETHICAL ISSUES AND PROCESSES

The following ethical issues and processes will be taken into consideration while undertaking this research project:

### **Risk of harm**

This research will neither put the participants nor the researcher to risk. The study will not use questionnaires or interview that might cause discomfort, embarrassment, or psychological or spiritual harm to the participants. There will be no processes during research that may prove to be potentially disadvantageous to a person or group. This research will not collect information about illegal behaviour(s), which could place the participants at risk of criminal or civil liability or be damaging to their financial standing, employability, professional or personal relationships. This research does not require the collection of blood, body fluid, tissue samples or similar. This research does not involve any form of exercise regime, physical examination, or deprivation. This research also does not include administration of any supplement, drug, medicine or placebo. This research will not cause any physical pain, beyond mild discomfort or expenditure of energy.

### **Informed and voluntary consent**

This research will not include participants who the researcher can identify as being unable to give written consent for any reason or who are unable to provide informed consent. There will be no participants from the class from which the researcher teaches. This research will only include participants over the age of 18 who are not in a dependent situation, such as people with a disability, or residents of a hospital, nursing home, or prison, or vulnerable in any other way. This research does not require previously collected information or biological samples.

### **Privacy and confidentiality**

This research does not involve evaluation or investigation of organisational services or practices, where personal or otherwise sensitive information is being collected, and where a participant may be identified. All data will be kept in password protecting the computer.

#### **Deception**

There will be no deception of participants, including concealment and covert observations.

#### **Conflict of interest**

There are no conflicts of interest for the researcher.

#### **Compensation to participants**

There will not be any payments or inducements to participants.

#### **Procedural**

This research does not require any further ethical requirement or approval from an outside organisation, or a Wintec Institutional Consent form.

#### **Treaty of Waitangi and Māori participation**

Māori are not the primary focus of this project.

#### **Other cultural considerations**

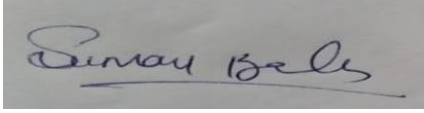
This research does not target any particular ethnic group, and no aspects of this project might raise specific cultural issues.

#### **Health and disability research committee review**

The participants of this research are not required to participate in their capacity as consumers of health or disability support services, or relatives or caregivers of consumers of health or disability support services. This research also does not include participants who are volunteers in clinical trials. This research does not involve the use of human tissue or participants' health information.

**Researcher(s) signature(s) (the name and signature of all researcher(s) are to be included):**

Name	Signature	Date
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Suman Bala		

**Primary Supervisor's signature (if this is a student application):**

Name	Signature	Date
Dr Kay Fielden		

**Research Leader's signature:**

Name	Signature	Date

**HERG Chairperson or delegated representative's signature (RPGO use only):**

Name	Signature	Date

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## COMPLETING THIS FORM

Please note: **A low risk research project is one in which the nature of the potential/actual risk of harm to participants or the researcher is minimal and no more than is normally encountered in daily life. If, as a staff member, you are new to research or are in any doubt as to which application to submit, please consult with your Research Leader. If you are a student, your supervisor will be able to give you advice. If you are still in any doubt, do not hesitate to consult the RPGO.**

### Specific Instructions

- All questions are to be answered. Note the questions within require a mix of descriptions, yes/no answers and cross the box (**Double-click on check boxes with your mouse and select 'Checked' from the options under 'Default Value'**).
- Research Leaders need to review the information in this form and sign it off prior to application being made to the RPGO.
- Please forward one signed original copy to the RPGO, together with an electronic version to [research@wintec.ac.nz](mailto:research@wintec.ac.nz).
- Low Risk Human Ethics in Research Applications also need to be accompanied by a copy of the Information Sheet, Consent Form, and any Questionnaires or Interview Schedules for consideration. If Questionnaires/ Schedules are not yet confirmed, please supply the latest draft.
- No questions are to be deleted, even those that you feel you are not required to answer.
- No part of the research requiring ethical approval should commence prior to approval being confirmed.
- Applicants will receive an official confirmation of submission via email from the RPGO once all conditions of this form have been completed.
- **If you want to apply for an extension on a previously approved project, please contact the RPGO, as you will probably not need to submit a separate application.**
- Applicants will be advised of the outcome of their application to the Human Ethics in Research Committee **no later than ten working days** after the completed and confirmed submission of this application.

**HUMAN ETHICS IN RESEARCH LOW RISK APPLICATION FORM - CHECK LIST**

<b>Research project title:</b>	<b>Impact of Customer Reporting on Airline Business</b>
<b>Name of primary researcher:</b>	<b>Suman Bala</b>

Attached please find (as applicable) in the order listed below	
<b>Completed HERG Low-Risk Application Form</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>Consent Form for participants</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>Information Sheet for participants</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>Copy of Focus Group Questions, Interview Schedule, or similar</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No